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# ·INQUIRY

CONCERNING

THE RISE AND PROGRESS,

## THE REDEMPTION, PRESENT STATE,

AND

### MANAGEMENT,

OF THE

## NATIONAL DEBT

01

## GREAT BRITAIN.

FROM THE SECOND LONDON EDITION, ENLARGED.

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PHILADELPHIA:

### PUBLISHED BY M. CAREY,

SOLD BY HIM AND BY WELLS & LILLY, BOSTON.

J R. A. SKERRETT, printer.

1816.

HJ 8623

29034

### PREFACE.

THE author of the following Inquiry has attended for a course of years to the progress of the national debt, from the interest which he felt as a member of the community in a subject of so much importance, and which has now assumed so alarming an aspect. As he has observed that many persons, in general well informed, were imperfectly acquainted with the facts, and entertained crude views of the principles of finance, he trusts that what he now submits to the public, may not be altogether useless.

In the first part, he lays down and enforces some general principles of finance. A person unacquainted with the management of our national debt, may blame him for bestowing labour to prove *truisms*, or principles which cannot be controverted; but to those who know that our financial measures have been conducted for a course of years upon opposite principles, the arguments adduced will not appear unnecessary.

In the second part, a particular detail is given of the origin, progress, management, redemption, and present state of the national debt. A part of these facts is generally known; but as few are possessed of full information on the subject, a publication of this kind seemed wanted. The author could not well have fixed upon a certain degree of information as what his readers already possessed, and supplied the remainder. Had he attempted to do so, his work would have presented a mutilated appearance, without being a great deal shorter. He has therefore drawn up such a narrative as may communicate all necessary information to a young person or a foreigner, who has no previous knowledge of the subject.

The materials for the statements previous to the year 1786, are drawn from the best authorities that could be procured; and, if not altogether correct, at least come near to the facts.—Those since 1786, are taken from the official papers presented to the house of commons, and the acts of parliament relative to finance. The author cannot expect that in so great a variety of figures and statements no error has been committed; but he trusts that the errors are neither numerous nor important.

In the third part, the propriety of the measures adopted in the management of our finance, is examined.

It cannot give any reasonable ground of offence, that the plans of respectable authors, and the measures of eminent statesmen, are discussed with freedom. The author is not conscious of having censured any persons with asperity: but wherever he thought their opinions erroneous, or their measures improper, he was under the necessity of stating lns views and of endeavouring to establish their correctness.

In this edition, the statements are continued to the present time, and have been carefully revised, and some errors corrected. An account and examination of Mr. Vansittart's plan of finance, adopted in the operations of the year 1813, is added;—also some general observations on sinking funds. An Appendix is subjoined, containing an account of the several stocks,—of the East India Company,—and of the manner of transacting loans and transferring stock;—and several additional Tables are inserted in the concluding Appendix.

### Character of this Work, from the Edinburgh Review.

"Dr. Hamilton has performed a most important service to his country, by directing the public attention to just views of this interesting subject.

"We have now stated the principal doctrines of this interesting publication. They are widely different from the opinions which have been hitherto prevalent, and which are sanctioned by the authority of great names; but they are supported by arguments which appear so convincing, and they lead to practical conclusions of such importance, that we trust they will be patiently and thoroughly canvassed; and we have no apprehension that the result will be unfavourable either to the author or his reviewer. It is pleasing to observe, in how simple, vet satisfactory a manner he explains a subject, which has been so long rendered almost unintelligible by the barbarous jargon of the Stock Exchange, and the necessary and unnecessary perplexities of official arguments. While he condescends to instruct the young student in the first principles of this important subject, he opens views which deserve the attention of the most experienced statesmen; and if we had not lived so long in this best of all possible worlds, and observed how the great ones of the earth, like the gods of the heathers, have eves but see not, and ears but do not hear-we should have been astonished that his name has never vet been mentioned in the senate. nor his principles either refuted or adopted by those who direct our financial operations."

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### INQUIRY

CONCERNING THE

# NATIONAL DEBT.

INTRODUCTION.

THE decision of national contests, in ancient times, depended upon the numbers, courage, and military talents of the contending nations. The invasions of barbarous hordes, destitute of wealth, and impelled to undertake these invasions by poverty, have often accomplished the subversion of large and wealthy nations, amply provided with all the means of warfare that wealth can furnish, and long renowned for military prowess; but fallen from their former pitch of valour, in consequence of the luxury which wealth gives rise to. In this manner were the Roman empires, western and eastern, subverted; and in this manner have the opulent and luxurious nations of the East been repeatedly subdued by indigent and hardy barbarians.

The great alteration in the state of mankind in modern times, and the changes introduced into the art of war, have, in some measure at least, transferred the decision of national contests to a different principle. Money

is said to supply the sinews of war; and gold, rather than steel, is accounted the instrument which leads to victory. It cannot be doubted that this is true in a certain degree, although not to the extent that some maintain.

In the middle ages, when the ferocious spirit which had formerly animated the northern nations, had in some degree subsided; while commerce was still in its infancy, and little national wealth accumulated; wars were carried on languidly, and were generally of short duration. Their operations were frequently interrupted by truces, and sometimes discontinued through mere feebleness. A victorious army, conducted by a war-like leader, was obliged to stop short in a successful career, from want of resources.

It is not our object at present to inquire into the sources of weakness, and incapacity for foreign expeditions, inherent in the feudal system, then more or less established in every nation in Europe. Under any system of government, the general wealth was insufficient to supply the expense of those extensive and long-continued wars which have been waged in later times. The revenue of the sovereign was derived partly from lands reserved as a royal demesne, and partly from feudal casualties, and afforded a slender provision for maintaining the royal state, and defraying the ordinary expenses of government; but was altogether inadequate to the support of numerous and permanent armies. Supplies from the people were obtained to a certain extent; but the people neither possessed the means, nor had acquired the habit of granting liberal supplies. Princes, under any emergency, real or supposed, or actuated by any scheme of ambition, had recourse to the measure of borrowing. The loans which they raised, were partly compulsory; and as the repayment was ill secured, the rate of interest was high. Sometimes the jewels of the crown were pledged, and sometimes the crown lands were mortgaged. In this manner, the revenues of most of the powers of Europe were anticipated and encumbered.

This irregular mode of borrowing gradually gave way to one more systematic; which has now been carried by this nation to an extent far beyond what was ever known in any other age or nation; far beyond what any person at its commencement, or even after its considerable advancement, believed to be practicable. This system is still expanding. The public debt, which was inconsiderable at the Revolution, has increased, in little more than a century, to its present magnitude. The increase during every reign, except the pacific reign of George I. has been greater than during the preceding. The increase during every war has been greater than during the preceding. The increase during the latter period of every war, except the present, has been greater than in the earlier period. The increase, by every national exertion, has been greater than administration held forth when the measure was undertaken. The part of the national debt paid off, in intervals of peace, has borne a small proportion to that contracted by the preceding war. No man can foresee how far this system may be carried, or in what manner it will terminate.

It, however, presents an aspect sufficiently important and alarming to command our most serious attention. In various periods of its progress it has obtained the attention, perhaps, of statesmen, who were unwilling to publish all they thought; certainly of men who were

skilled in the principles of political economy, and well acquainted with the state of our finances; and none of these, it is believed, have considered it in a trivial point of view. Perhaps the unexpected magnitude to which the public debt is carried, and the ease with which the funds for its annual augmentations are procured, have contributed of late to blunt the public feelings on this important object.

Various schemes have been proposed, by means of sinking funds, for diminishing, and, in course of time, discharging our national incumbrances; and some of these have been carried into execution to a certain extent. The confidence placed in the efficacy of these schemes has contributed further to ease the alarm which the magnitude of the public debt would otherwise have produced. Their principles and probable result ought to be scrutinized in the strictest manner. If they be adapted to the relief and ultimate discharge of our national burthens, under the system of protracted and expensive warfare in which we are engaged, let us enjoy the comfort, which such a prospect affords, upon rational grounds. If they be, in whole or in part, deceptious, it is proper that the deception should be pointed out, and that we should know the hazards and the limits of our financial system. If we shut our eyes to national dangers of whatever kind, we are most likely to be overwhelmed by them. If we see them in their true colours. we stand the fairest chance of encountering them with success. If a candid inquiry into this subject should lead to results less favourable than those which have been held forth by high authority, and are readily adopted by the sanguine disposition of the public, the inquirer performs the part of a true friend to his country, and ought not to be charged as acting from factious motives.

In the following Inquiry we propose,

First, To lay down some general principles, which, if established, would lead to general conclusions, concerning our financial system, and in a great measure, supersede the necessity of examining particular plans which have been proposed or adopted.

Secondly, To give a narration of the manner in which we have proceeded in conducting and accumulating our public debt, and a statement of its present amount and annual charge, and an account of the plans which have been proposed or adopted for its discharge, and their operation. The necessary tables in illustration of these particulars will be subjoined in an Appendix.

Thirdly, By means of the general principles, to scrutinize the efficacy of the schemes to which we trust for the relief of our national burthens; and examine the propriety of the methods we have adopted in conducting our financial operations.



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### PART I.

#### CENERAL PRINCIPLES OF FINANCE.

- I. The annual income of a nation consists of the united produce of its agriculture, manufactures, and commerce. This income is the source from which the inhabitants derive the necessaries and comforts of life; distributed, according to their stations, in various proportions; and from which the public revenue, necessary for internal administration, or for war, is raised.
- II. The portion of national income which can be appropriated to public purposes, and the possible amount of taxation, is limited; and we are already far advanced to the utmost limit.
- III. The amount of the revenue raised in time of peace, ought to be greater than the expense of a peace establishment, and the overplus applied to the discharge of debts contracted in former wars, or reserved as a resource for the expense of future wars.
- IV. In time of war, taxes may be raised to a greater height than can be easily borne in peaceable times; and the amount of the additional taxes, together with the surplus of the peace establishment, applied for defraying the expense of the war.
- V. The expense of modern wars has been generally so great, that the revenue raised within the year is insuf-

ficient to defray it. Hence the necessity of having recourse to the system of funding, or anticipation. The sum required to complete the public expenditure is borrowed on such terms as it can be procured for; and taxes are imposed for the payment of the interest; or perhaps to a greater extent, with a view to the gradual extinction of the principal.

VI. In every year of war, where this system is adopted, the amount of the public debt is increased; and the total increase of debt during a war depends upon its duration, and the annual excess of the expenditure above the revenue.

VII. In every year of peace, the excess of the revenue above the expenditure, ought to be applied to the discharge of the national debt; and the amount discharged during any period of peace, depends upon the length of its continuance, and the amount of the annual surplus.

VIII. If the periods of war compared with those of peace, and the annual excess of the war expenditure, compared with the annual savings during the peace establishment, be so related, that more debt is contracted in every war than is discharged in the succeeding peace, the consequence is a perpetual increase of debt; and the ultimate consequence must be, its amount to a magnitude which the nation is unable to bear.

IX. The only effectual remedies to this danger, are the extension of the relative length of the periods of peace; frugality in peace establishment; lessening the war expenses; and increase of taxes, whether permanent, or levied during war. X. If the three former of these remedies be impracticable, the last affords our only resource. By increasing the war taxes, the sum required to be raised by loan is lessened. By increasing the taxes in time of peace, the sum applicable to the discharge of debt is increased. These measures may be followed to such an extent, that the savings in time of peace may be brought to an equality with the surplus expenditure in time of war, even on the supposition that the periods of their relative duration shall be the same for centuries to come that they have been for a century past.

XI. When taxation is carried to the extent mentioned above, the affairs of the nation will go on, under the pressure of existing burdens, but without a continual accumulation of debt, which would terminate in bankruptcy. So long as taxation is below that standard, accumulation of debt advances; and it becomes more difficult to raise taxation to the proper height. If it should ever be carried beyond that standard, a gradual discharge of the existing burdens will be obtained; and these consequences will take place in the exact degree in which taxation falls short of or exceeds the standard of average expenditure.

XII. The excess of revenue above expenditure, is the only real sinking fund by which public debt can be discharged. The increase of the revenue, and the diminution of expense, are the only means by which this sinking fund can be enlarged, and its operations rendered more effectual: and all schemes for discharging the national debt, by sinking funds operating by compound interest, or in any other manner, unless so far as they are founded upon this principle, are illusory.

The greater part of these propositions are so incontrovertible, that it may appear superfluous to adduce any arguments in support of them, and the others may be inferred from these by a very obvious train of reasoning. Yet measures inconsistent with them, have not only been advanced by men of acknowledged abilities, and expert in calculation, but have been acted on by successive administrations, and annually supported in parfiament, and ostentatiously held forth in every ministerial publication. These seem to have gained possession of the public mind, and we hear them daily extolled and confided in by persons, in other respects, candid and intelligent. This not only supplies an apology for examining the principles minutely, but renders such an examination necessary.

1. The annual income of a nation consists of the united produce of its agriculture, manufactures, and commerce. This income is the source from which the inhabitants derive the necessaries and comforts of life; distributed, according to their stations, in various proportions; and from which the public revenue, necessary for internal administration, or for war, is raised.

In every nation, a part of the public income must be drawn from the use of the inhabitants, and applied to public purposes. This constitutes the national revenue, and is levied from the people by taxes. The amount required for this purpose, even in peaceable times, and when all practicable economy is observed, is considerable. The administration of justice and police, the support of such an army and navy as the present state of surrounding nations renders necessary, and various

other objects, require a large expenditure. In time of war, the public expenditure is greatly increased.

This expenditure, however reasonable and necessary, is defrayed by subtracting from the funds which supply the wants of the people, and tends to lessen their enjoyments. Taxation, therefore, although necessary, is not desireable. It may arise to a magnitude which will press severely on the comforts, and even encroach on the necessaries of the middling and lower ranks. Unnecessary public expenditure, whether occasioned by engaging in wars which might be avoided, or conducting necessary ones with improper prodigality, or by extravagance in internal administration, is a serious evil to the public.

The proposition here laid down concerning taxation, will not be universally admitted. Taxes are affirmed to be harmless, and even useful, upon two principles. They are said to be a spur to industry; and the money collected is said to be no loss to the community, as it is returned by various channels to the people from whom it was raised.

It is foreign to the object of our present inquiry to enter into a full examination of the arguments adduced in support of these opinions; and it could not be done without a full discussion of the principles of political economy.

In regard to the first, we may briefly observe, that the desire inherent in every man to improve his circumstances, is a sufficient and effectual incitement to exertion. The farmer raises all the produce he can from his land. If he be deficient, it arises from want of capital, or of agricultural knowledge. The manufacturer extends his operations as far as his capital, the extent of the market, and the number of hands he can employ,

permit him. In time of war, the sums exacted in taxes lessen the abilities, and consequently the exertions of both. In regard to commerce, the effects of war are various. Many branches are circumscribed, or altogether destroyed. Others go on with increasing alacrity: but taxation is never the cause of their enlargement. The merchant generally advances the tax, and, as this employs part of his capital, he is obliged to circumscribe his speculations. He is afterwards reimbursed, perhaps with profit, by raising the price of his commodities, and thereby devolving the tax on the consumer: but the enhancement of price can never increase the quantity of merchandize sold. The only classes of men upon whom taxation can be reasonably supposed to operate as a spur to industry, are those of the lower order, who earn their subsistence from day to day by the labours of agriculture or manufactures. If a man can maintain himself and family by four days work in the week, he will not, it is said, work for six. In regard to those employed in agriculture, this seldom takes place. The unremitted labours of the peasant are obvious to every one. In regard to manufacturers and tradesmen, there is more foundation for the observation. A few intemperate tradesmen, unless compelled by necessity, may spend a day or two weekly in the ale-house. But it is notorious, that the greater number continue regularly at their work, except upon rare occasions; and not a few wear out their constitutions by excessive and too long continued exertions. It is a comparatively small part of the taxes which falls upon persons in these stations of life.

The other argument (that taxes are only an imaginary evil, because the money is returned by various channels to those from whom it was collected,) is founded

upon the principle of the mercantile system, that money constitutes wealth—a principle which has been ably refuted by writers on political economy, and is now generally abandoned. The farmer pays part of his produce, or its value, in taxes, and has so much the less for other purposes: that is, he is so much poorer. The money may be brought back to him to purchase another part of his produce for the consumption of the army or navy; but the same men who constitute the army and navy must have been maintained, and his produce would have found a market. Even if money were admitted to constitute wealth, it is not true that all the money raised by taxes returns to those who pay them. A large part is sent abroad for subsidies to foreign powers, and for the support of armies employed in foreign service.

II. The portion of national income which can be appropriated to public purposes, and the possible amount of taxation, are limited; and we are already far advanced to the utmost limit.

The truth of the first part of this proposition is so obvious, that it may seem unnecessary to enlarge on it. Yet the unexpected increase of the public revenue has drawn off the attention of many from its ultimate limit. They will not affirm that it may be extended to an indefinite magnitude; but, as it has been carried so much further than our fathers, or we ourselves in early life, believed to be practicable, they maintain, that its future extension may be greater than any one now conjectures; and that its reaching a maximum is so distant an event, that the prospect of it ought not at present to have any influence on our public measures.

It may, however, be evinced, that a large proportion

of our resources is already exhausted; and that the continued increase of revenue, at a rate equal to what has taken place these last twenty years, cannot be carried on for a long term of future years.

The whole annual income cannot, under any exigency, be appropriated for public revenue. A sufficiency must be reserved for supplying the necessaries of life. The surplus only can be applied to public purposes, and the proportion which can be actually applied to them for any length of time falls much below this limit.

Taxes upon articles of luxury, if raised beyond a certain pitch, lessen their consumption, and become unproductive. The same holds in some degree with regard to taxes on every article not indispensably necessary; and our government has hitherto wisely been sparing of taxes on the necessaries of life. Taxes upon commerce, for the same reason, have their limit; and it seems to be believed, that the system of indirect taxation, in some respects the most eligible, is now carried nearly as far as it can be done: For, instead of raising all the revenue wanted by taxes of this kind for some years past, recourse has been had to the system, little used before, of direct taxation.

Our direct taxes are of two kinds. The first is a tax upon legacies and successions in case of intestacy, being a certain proportion of the moveable property left by every person at his death, varying according to the propinquity of the successor to the deceased, and amounting to ten per cent. on property left to remote relations or strangers. Of the same nature is another tax, a stamp duty on the probates or inventories of personal estates, wherein no abatement is allowed, in whatever relation the successor may stand to the deceased.

The second and more considerable branch of direct taxation is that of a certain proportion of every man's

income, from whatever source it arises. This has been considered as a war tax, and was first imposed in 1799, under the name of the income-tax, at the rate of ten per cent. After a short intermission during the peace which succeeded the treaty of Amiens, it was revived in 1804, under the name of the property-tax, at the rate of five per cent.: raised in 1806, to six and one-fourth per cent.; and in 1807, to ten per cent.; at which rate it has continued since. Incomes under L.50, arising from annuities or professional gains, are exempted; and incomes of that sort under L.150, are entitled to certain deductions according to an established scale; but every income, however small, arising from capital of any kind, is subject to the full tax of ten per cent. The assessed taxes raised upon houses and windows may also be referred to the head of direct taxation.

The amount of property-tax levied, at an average of three years preceding 5th January 1813, was I.13.281.509; and the whole average amount of taxes. permanent and annual, raised during these years, after deducting drawbacks, &c. was L.64,860,192. If the property-tax be ten per cent. upon the general amount of income, the whole taxation is nearly fifty per cent.. or one-half. The lower classes indeed are exempted, or relieved in a certain proportion from the property-tax; and it is probable, that among the higher classes who ought to pay ten per cent. considerable evasions take place: but as the higher and middling ranks pay almost the whole of the assessed taxes, and a larger proportion of the taxes on consumption, their taxation cannot fall much below one-half of their income; and therefore we are already far advanced to the utmost limit which taxation can ever reach. The lower classes indeed pay a smaller proportion; but it will hardly be thought prudent or practicable to raise the taxes upon

them in a higher proportion than is done to their superiors.

If we be nearly right in this view, it is impracticable, in the present state of public wealth, to double our present revenue by increased taxation; and it would be a measure of great difficulty and danger to enlarge it by one-half.

We do not, however, affirm, that the nominal, or even the real amount of our revenue, can never, at any future period, amount to double its present magnitude. A nominal increase may arise from the depreciation of the value of money, which has taken place rapidly for a century past, and is probably still advancing. This depreciation is necessarily accompanied by a nominal increase of public expenditure; as every article which government has occasion to purchase, and the pay of every person in civil or military employment under government, must be increased in the same proportion.

The increase, therefore, of nominal revenue, while its effective power remains the same, affords no advantage to the public.

The increase of the money-price of commodities arises from two distinct sources, of which, although the effects be blended, the principles, when analyzed, are of a very different nature. The first is the relative increase of the circulating medium, compared with the mass of commodities in circulation. This, so far as it arises from addition to the quantity of gold and silver in circulation, although it first takes place in the nations that are proprietors of the mines of the precious metals, has a tendency, in no long time, to diffuse itself, nearly equally, among all nations connected by a regular commercial intercourse. The effect of it is to subject every creditor, public or private, to a loss in proportion to the extent of the deterioration of the value of money. It

consequently discharges part of the public debt; but it produces little effect upon the actual revenue, or the state of commerce. An increase of circulating medium, by the artificial means of paper credit, has the same effect upon the price of commodities, and upon the property of creditors, as an increase of circulating coin: but this, although adopted under one form or other by most mercantile nations, has not the same tendency to equalization, and may occasion considerable changes in the state of commerce; always to the disadvantage of the nation where fictitious circulating medium most prevails.\*

The second cause of the increase of the price of commodities, is the taxes imposed upon manufactures, of which we have now a great variety, and upon merchandize imported. The amount of the tax is incorporated with the natural price of the commodity, and paid along with it by the consumer. It is nearly the same as if the consumer paid the natural price of the commodity to the manufacturer or importer, and paid at the same time a tax to government, in proportion to the extent of his consumption. Something of this sort actually took place in what was called the Commutation Tax. When government found it expedient to repeal a part of the duties upon tea, it imposed a tax upon every person for the quantity of tea he was conjectured to consume, as ascertained by the number of windows in the house he possessed. This part of the price of commodities, unless drawn back upon exportation, operates as an obstruction to commerce; and even when drawn back, the relief is only partial. For it is not merely the amount of the tax which the manufacturer must lay upon his commodities: he must have an allowance for the advance of money,

and for the additional wages paid to his workmen to enable them to pay the taxes on what they consume. Creditors, public or private, do not sustain any special injury by this part of the increase on the price of commodities. They only contribute their share, along with others, to the increased exigencies of the public.

A real increase of revenue may arise from an increase of national wealth; and this increase of revenue will be obtained by the existing taxes becoming more productive, without the imposition of new ones. Our wealth has increased to an amazing magnitude, and we do not affirm it has reached its utmost limit: but, considering the extent to which our commerce, a chief source of our wealth, is already carried, it is not reasonable to depend upon its further increase, under growing burdens, as an inexhaustible source for supplying all our exigencies in a state of continued warfare.

III. The amount of the revenue raised in time of peace, ought to be greater than the expense of a peace establishment, and the overplus applied for the discharge of debts contracted in former wars, or reserved as a resource for the expense of future wars.

THE propriety of this conduct is obvious, and it has been adopted to a certain extent, but has not been followed out with important efficacy.

In the earlier part of our history, the ordinary revenue was hardly sufficient for the ordinary expenditure; and parliamentary supplies, in time of peace, were rarely granted. Henry VII. was the last, and, we believe, the only English king, in modern times, who amassed a considerable treasure by a parsimonious and oppressive

administration, during a reign the greater part of which was passed in peace. This treasure was dissipated in a short time by his successor. It is unnecessary to enter into a detail of the financial measures of each reign, from that time to the Revolution. Although the period, compared with that which followed, was on the whole pacific, it never afforded any surplus of revenue.

The nature and efficacy of the different kinds of sinking funds established since the Revolution, will be con-

sidered in the third part of this inquiry.

The amount of the payments of the public debt, in time of peace, subsequent to the Revolution, has been as follows:

During the peace which followed the treaty of Ryswick, being a period of four years, from 1697 to 1701, there was discharged L.5,121,041 of funded debt, being L.1,280,260 annually, at an average;\* and at the rate of L.5.95 per cent. on the public debt existing at the termination of the preceding war.

During the peace which followed the treaty of Utrecht, being a period of twenty-six years, from 1714 to 1740, there was discharged L.7,231,508, of funded debt, being L.278,135 annually, at an average; and at the rate of L.0.52 per cent. of the public debt existing at the termi-

nation of the preceding war.

During the peace which followed the treaty of Aix-la-Chapelle, being a period of eight years, from 1748 to 1756, there was discharged L.6,003,640, being L.750,455 annually, at an average, and at the rate of L.096 per cent. of the funded debt existing at the termination of the preceding war.

During the peace which followed the treaty of Paris, being a period of twelve years, from 1763 to 1775, there was discharged L.10,996,016, being L.916,334 annually, at an average, and at the rate of L.0.68 per cent. of the funded debt existing at the termination of the preceding war.

During the peace which followed the American war, being a period of ten years, from 1783 to 1793, there was redeemed by the commissioners for the reduction of the national debt, L.10,242,100, being L.1,024,210 annually, at an average, and at the rate of L.0.43 per cent. of the funded debt existing at the termination of the preceding war.

No debt was paid off in the short peace which followed the treaty of Amiens in 1802.

IV. In time of war, taxes may be raised to a greater height than can be easily borne in peaceable times; and the amount of the additional taxes, together with the surplus of the peace establishment, applied for defraying the expenses of the war.

It is not intended to affirm that the power of a nation to bear taxes is increased in consequence of its being engaged in war. The contrary is always the case. Commerce, manufactures, and agriculture are the sources from which all revenue is derived. The two former may be ameliorated in certain branches by war, but they are depressed on the whole; and agriculture also suffers in some degree: but the necessity of the case, real or supposed, has a powerful influence on the public mind, and reconciles the community to submit to privations, which in peaceable times would be accounted insupportable.

Before the introduction of the funding system, national exertion was limited by the revenue which could

be raised within the year: but so soon as that system was established, the selfish practice of devolving the burdens, arising from the exigencies or passions of the present age, upon posterity, was adopted in its full extent. The first attempt to defray any considerable part of the war expenses by taxes raised within the year was under Mr. Pitt's administration in 1798, when the aid and contribution tax was imposed, being a large addition to the former assessed taxes on houses, windows, servants, horses, carriages, &c. regulated by an increasing scale according to the amount of the former assessment.

This tax, not succeeding to expectation, only subsisted one year, and was succeeded by the income tax, already mentioned. Another war tax, first imposed in 1798, was an additional duty on all goods exported and imported, partly according to a table, and partly at so much per cent. on their real value, as ascertained by the oath of the merchant, together with a tax upon the tonnage of shipping. This tax is sometimes called the convoy tax, being considered as a compensation for the security which our trade receives in time of war by sailing with convoy. These, together with some smaller articles, amounted in 1812 to L.21,838,166, being about one-third of our whole taxation, and are proposed to be taken off so soon as peace is restored.

Whether this relief will be actually granted, or whether the burdens will prove perpetual, is at present among the secrets of futurity. Past experience shows, that taxes have been often imposed at first for limited terms, and afterwards rendered perpetual; and the incroachments that have been already made upon the war taxes, do not promise fair for their speedy removal. In the years 1798, 1799, 1800, a sum of no less than

L.56,445,000 was charged upon the war taxes,\* and distinguished from what was then called the permanent funded debt, being intended to be discharged by continuing the war taxes after the restoration of peace. This system, however, was abandoned under Mr. Addington's administration, and the above sum consolidated with the rest of the funded debt. The war taxes were discontinued during the short peace. The system adopted by lord Henry Petty, in 1807, would have entirely absorbed the war taxes for an indefinite period if it had been continued; and during the only year it was acted on, the war taxes were mortgaged for the interest and sinking fund of the loan of that year, for a term of at least fourteen years, to the extent of - L.1.200,000 and in 1809 the charges of the loan were again laid upon the war taxes-amount, -1,040,000

Sum for which the war taxes are pledged, L.2,240,000

The war taxes are also charged with the interest, &c. of the loan 1811, but certain additional duties imposed that year are added to the war taxes, which are expected not only to defray that charge, but to afford a surplus. The measure, however, of blending the war taxes in this manner, with the general revenue, is not favourable to the prospect of their speedy removal.

<sup>\*</sup> See Appendix, Table VI. † See Note II.

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V. The expense of modern wars has been generally so great, that the revenue raised within the year is insufficient to defray it. Hence the necessity of having recourse to the system of funding, or anticipation. The sum required to complete the public expenditure is borrowed on such terms as it can be procured for; and taxes are imposed for the payment of the interest; or perhaps to a greater extent, with a view to the gradual extinction of the principal.

VARIOUS causes may be assigned for the increased expense of war in modern times; the nature of our military weapons; the entire separation of the character of the soldier from that of the citizen; the extensive system of colonization and foreign settlements, in consequence of which, a national contest, which a few centuries ago would have been decided by a battle on the frontiers of the contending nations, now extends the ravages of war to every corner of the globe: and since the system of the balance of power has prevailed, large sums have been granted by more opulent states, as subsidies to others sunposed to be interested in the same common cause. While these and other causes have led to great expense, the increase of national wealth has supplied the means, and the rulers of this nation in particular, by a strict adherence to public faith, and by a well regulated system of transfer, have been able to draw forth a large proportion of the wealth of their subjects, and a share of that of foreigners, for the exigencies of the public. The progress of our public debt, and manner of conducting it, will be detailed in the second part this inquiry.

VI. In every year of war, where this system is adopted, the amount of the public debt is increased, and the total increase of debt during a war depends upon its duration, and the annual excess of the expenditure above the revenue.

VII. In every year of peace, the excess of the revenue above the expenditure ought to be applied to the discharge of the national debt; and the amount discharged during any period of peace depends upon the length of its continuance and the amount of the annual surplus.

VIII. If the periods of war compared with those of peace, and the annual excess of the war expenditure compared with the annual savings during the peace establishment, be so related, that more debt is contracted in every war than is discharged in the succeeding peace, the consequence is a perpetual increase of the debt; and the ultimate consequence must be its amount to a magnitude which the nation is unable to bear.

The two former of these propositions appear incontrovertible, and the first part of the other follows from them as a necessary consequence.

The doctrine of our national debt amounting to a magnitude which the nation is unable to bear, will not be easily relished. We are accustomed to hear of our inexhaustible resources, and we have experienced the amount of our debt to an amazing magnitude with less pressure than might have been expected.

The observations already made in illustration of the second proposition show how far our resources are already exhausted.

In Part II. Section I. there is given a statement of the amount of the funded debt at the commencement of each war, and of each peace, from the Revolution in 1688, to the present time, being a period of 124 years, and the amount of debt, contracted in each period of war, and discharged in each period of peace. The number of years of war in that period is 63, and those of peace 61: but the duration of war expenditure compared with that of peace establishment will be found considerably greater than that proportion, for,

1st. A long time is required at the termination of a war, before affairs can be brought to the situation of a peace establishment, and a large expense is incurred during that period. If we add a year of war expenditure to the duration of each war on this account, we shall not go beyond the fact.

2d. Besides the wars enumerated in the statement, the nation has been put to expense by several armaments, when national disputes assumed the appearance of war, although they were adjusted with slight or no hostilities. Something of this kind occurred in regard to Spain oftener than once in the early part of the 18th century, and again with the same power, in 1770, from a dispute concerning the Falkland islands in the south extremity of South America, and in 1790, from a dispute concerning Nootka Sound in the northern extremity of North America. When these circumstances are attended to, the period of war expenditure will be found considerably greater than that of peace establishment.

The whole debt contracted during 63 years of war is L.638,129,577, being L.10,129,040 annually, at an average.

The whole debt discharged during 61 years of peace is L.39,594,305, being L.649,087 annually, at an average: but the average sums are not those which chiefly claim our attention. It appears by inspection of the table how rapidly the debt contracted in the latter part of the period has increased; and future events will more probably assimilate to that than to an earlier period.

The whole debt contracted during the period of war is to the whole debt discharged during the period of peace, as 16.12 to 1.

The average debt contracted annually in war is to the average debt paid annually in peace, as 15.65 to 1.

It is maintained by many that there is no cause to be alarmed at the magnitude of the national debt, because the greater part of the national creditors are our fellow citizens, and a debt owing by one part of the community to another is in effect no debt at all. Some go so far as to maintain that the national debt is a part of our national wealth, and ought to be reckoned, along with the value of our commerce, manufactures, and agriculture, in estimating the amount of the national capital.

With these last we shall not undertake to argue. Towards the others we shall partly concede the point: but when every reasonable concession is made, enough still remains to place the magnitude of the national debt in an alarming point of view.

The large amount which the public has been able to borrow, is a proof of a large capital existing among the community, and affording a surplus after the demands of commerce, manufactures, and agriculture, in their actual state, are supplied: but it is unwarrantable to affirm that the contraction of debt is necessary in order to find employment to this capital, or that it could not have been invested in various ways to the further increase of our public wealth in its genuine sources. This would have diffused an additional share of the comforts of life through every rank of society. The taxes, which the public debt requires, lessen these comforts. The wars in which money has been expended, if not unnescessary, are certainly unprofitable. The interest of the public debt is, for the greater part, drawn from the pre-

fits of the industrious part of society, and paid to the idle and luxurious. It is drawn from the merchant, the manufacturer, the farmer, and paid to the stockholder. The amount so drawn may be augmented till it occasion the ruin of those who pay it, and involve the whole community in distress and confusion.

Perhaps some think, though they do not venture to say, that matters may be restored, by means of a public bankruptcy: and that this nation, after such a measure, will retain the same degree of internal wealth, and support the same strength and importance in its relations to foreign states as if no national debt had ever existed. It will not be necessary to enter into a long refutation of this opinion. The extent of distress attending a public bankruptcy, whether brought on systematically or overtaking us as the necessary consequence of our being overwhelmed with the magnitude of our debt, would be so great; the present overthrow of every thing valuable so complete; and their future extrication so uncertain, that we can hardly conceive a greater public evil. Among its probable consequences we may reckon internal insurrections, and foreign invasions by rival or hostile nations, taking advantage of the time of our distress and weakness.

Every friend to Britain, every friend to humanity, must deprecate such an event, and a proper sense of the calamities in which it would involve us, should keep us at a cautious distance from the verge of so dreadful a precipice.

"Does the circumstance of our creditors being our fellow citizens afford no relief to the magnitude and burden of our national debt, and are we in the same situation, as if we were indebted to foreigners?" We do not affirm so. So long as public faith is maintained, there are two ways in which the burden of our debts is alleviated by having our countrymen for our creditors.

1st. A part of the taxes raised for the payment of interest, and also for other purposes, falls upon the stockholder, and this part is more considerable as the national debt increases, and bears a greater proportion to the whole of the national capital.

2d. The expenditure of the stockholder may in some measure increase the profit of the industrious citizen—but allowing for these advantages, still, the greater part of the burden falls upon the industrious, and it receives only a very partial relief from any advantage resulting from the expenditure of the idle.

It is argued by those who still retain the generally exploded opinions concerning money, that all the money raised in taxes, at least all that comes to the stockholder, is spent among those who pay it, and that therefore it is no loss to them. This is no less absurd than the defence of a house-breaker, who being convicted of carrying off a merchant's money, should plead that he did him no injury, for the money or part of it would be employed in purchasing the commodities he dealt in, upon which he would receive a profit.

Were a national bankruptcy ever to take place, perhaps less evil might attend it if our creditors were foreigners. It would not in that case occasion internal distraction and convulsion. The evil to be dreaded would be war with the injured nations, and as we would retain our full national strength, and our resources would then be unincumbered with debt, they might not find it prudent to attack us. However, as we hold a breach of national faith in detestation, we recollect with pleasure, that the far greater part of our creditors are our fellow citizens,\*

In part of the foregoing argument we have spoken of

the industrious citizen and the stockholder as being separate persons, and, in some respects, of opposite interests. In many individuals these characters are blended: but, in most cases, the one or the other character predominates, and if, in a few, they be nearly equally balanced, it does not affect the general argument.

IX. The only effectual remedies to this danger are the extension of the relative length of the periods of peace; frugality in the peace establishment; lessening of the war expenses; and increase of taxes, whether permanent, or levied during war.

As the object of the present inquiry relates to our national revenue, debt, and resources, we shall avoid, as far as possible, the collateral subject of entering into an examination of the necessity or rashness, the expediency or inexpediency, the justice or injustice, of the wars in which we have been engaged. If the result of our inquiry should be, that we are not able for another century to carry on our warlike system in a manner similar to that which we have done in the period above reviewed, the rational inference is that we should engage in wars with much circumspection, and terminate them as soon as can be done with safety.

If nations could derive wisdom from past experience, and from the judgment which is formed of many former wars, now that the passions which excited them are subsided, much might be urged in favour of a pacific system. It will be admitted that we have frequently engaged in war for trivial or unattainable objects—that the objects have generally not been attained—that, under pretence of guarding against distant and improbable dangers, we have incurred present and imminent ones—that passion

and national pride, rather than rational views of national interest, have been often the ruling principles of our public conduct—that, as we have engaged in war rashly, we have persevered in it with obstinancy, and rejected offers of pacification more favourable than those which we were afterwards under the necessity of accepting.

The view we entertain of the war of the present day is seen through a different medium. Every thing valuable to us as men and as a nation is at stake—our national prosperity, our national honour, our national existence—our liberties and lives. No exertion can be too great. The power of our enemy is so formidable, and his ambition so insatiable, that we have no alternative but to prosecute the war with the utmost vigour, till we lay him prostrate at our feet. No pressure of increasing burdens is to be regarded; no dread of exhausting our resources entertained. If he make repeated overtures of pacification, they are to be considered as insidious, and rejected with scorn.

While these passions prevail, any arguments against our belligerent conduct, whether drawn from past experience, or from a cool view of present circumstances, will be urged in vain. As the judgment we now form of the measures of our ancestors is different from theirs, it may happen that the judgment formed of the measures of the present day by posterity, or by the younger part of our fellow citizens, when in advanced life, may be different from ours.

Suppose the present war brought to a termination in a manner that left our situation in the scale of nations nearly the same as it has been for some centuries past, could it be reasonably expected that the succeeding period would be more pacific than the past? We can hardly expect it would. If reason and past experience were listened to, they have much to urge: but

the world is not now in its infancy, and experience has long furnished the same lessons of the inefficacy and destructive tendency of war, in vain. It is likely the same passions will involve rival nations again in the calamities of war, upon slight or no grounds. If there be any circumstance likely to assuage the passion for war, it arises from the pressure of public debt, a system peculiar to modern times, the effects of which, when carried to its utmost extent, have not yet been submitted to the test of experience.

In regard to the public expense during a future peace, it is generally believed that the state of Europe, under any probable terms by which the present war may be concluded, will be such as may render it necessary to keep up a higher peace establishment than we have hitherto done.

In regard to the expense of future wars, it is not in general wise, admitting their necessity or propriety, to be sparing in exertion in those points where the contest is likely to be effectually decided. Our operations ought to be as prompt and vigorous as we can make them. Neither ought we to be sparing in any expense that contributes to the health and comfort of the soldier, the care of the sick and wounded, the comfortable provision for the worn-out and disabled: but there are other points in which, without enfeebling national exertion, or without encroaching on the demands of humanity. economy may be properly practised. The following questions in regard to the expenses of past wars may be proposed. Have there been no unnecessary and ineffectual expeditions undertaken? Have not considerable armies been kept in places where they could be of little or no use? Has there been no lavish expenditure in fortifications and barracks? Has not the system of increasing the number of our foreign colonies, and consequently the expense of establishments and garrisons, been followed to the utmost extent, and in quarters where it did not weaken our enemy; and where, by employing a part of our disposeable force, it weakened our exertions in points of more importance? Have the national expenses been conducted with all prudent frugality? or have not enormous fortunes been amassed by public contractors? Have not large sums been retained for long periods of time in the hands of public accountants, and have not large sums been ultimately lost by the insolvency of these accountants, from whom sufficient security had not been taken? Have not large subsidies been granted to foreign powers whose fidelity we had just, cause, from experience, to distrust, and who actually proved unfaithful?

Most of these questions will be generally answered in the affirmative of misconduct: and yet we find the estimates of the expense of each succeeding year are formed on a larger scale; that the execution generally exceeds the estimate; and that motions for inquiry into the public expenditure and correction of abuses, are generally discouraged; and that even where abuses in public office are admitted, speedy and effectual measures are not taken for their corrections. X. If the three former of these remedies be impracticable, the last affords our only resource. By increasing the war taxes, the sum required to be raised by loan is lessened. By increasing the taxes in time of peace, the sum applicable to the discharge of debt is increased. These measures may be followed to such an extent, that the savings in time of peace may be brought to an equality with the surplus expenditure in time of war, even on the supposition that the periods of their relative duration shall be the same for centuries to come that they have been for a century past.

The difficulty and danger of a further increase of our taxes have been already considered. Every new imposition, as we approach the limit of taxation, becomes more oppressive and more unproductive. But if we cannot, or will not, adopt more frugal or more pacific measures, there is no alternative but an increase of our taxes to the extent above mentioned: and, if we cannot bear this increase, it is impossible to escape national bankruptcy.

We are far advanced to the utmost extent to which taxation can be carried: but we have also gone far towards defraying our annual expenses by money raised within the year. During the last ten years, or thereby, though we have been engaged in a war of unprecedented expense, the amount of our taxes has been greater than the expense of the war, but insufficient to answer, along with that expense, the interest of the debt formerly contracted. Taxation is now carried, perhaps, as far as is necessary, upon the supposition that the intervals of peace in future were equal to the time of war. We have now been engaged in war for upwards of twenty years, with scarcely any interval, and without having approached to the ostensible object for which it was

undertaken; and some maintain, that since the former system of Europe is now dissolved, there is no safety for us but in perpetual war. These, if they were consistent, would perceive the necessity of raising our taxes to the amount of our full expenditure. We reprobate the idea of eternal war as barbarous and impracticable: but if we have still the prospect of long protracted war, prudence requires us to raise our taxes to the measure of our expenditure; which, however severe a pressure it may occasion at present, must, if deferred, occasion a still heavier pressure at a future period, when our public debt is further accumulated.

So long as the practice was followed of defraying almost all the war expenses by loans, and imposing taxes only for the payment of interest, the burdens of the war were so lightly felt, that the national promptness to engage in war was scarcely under any restraint. Now, when a great part of the expense is raised within the year, and much of it by direct taxation, the burden is far more heavy, and this pressure would go far to indispose the nation for war, except in a situation where the necessity for prosecuting it was considered as great, or where hostile passions were excited to a more than usual height. Still, however, our burdens are not raised to the measure of our expenditure, and therefore the restraint does not operate so far as it ought. Let us now feel the full extent of the burdens we must ultimately bear, and let it be tried how far our relish for war will continue. Justice to posterity requires this. Every generation has its own struggles and contests. Of these, and of these only, it ought to bear the burden. We at present labour under a heavy debt contracted by our ancestors, in wars, perhaps unnecessary, certainly arising from causes now past and gone, with which we have no concern; and, under a still heavier one, arising

from wars waged in our own days, the burdens of which, at the time, we were unwilling to bear. Had the debt accumulated in these wars not existed, our present taxes would have been more than sufficient to defray all the expenses of our present war, widely as it is extended, and lavishly as it is conducted.

- XI. When taxation is carried to the extent mentioned above, the affairs of the nation will go on, under the pressure of existing burdens, but without a continual accumulation of debt, which would terminate in bankruptcy. So long as taxation is below that standard, accumulation of debt advances, and it becomes more difficult to raise taxation to the proper height. If it should ever be carried beyond that standard, a gradual discharge of the existing burdens will be obtained, and these consequences will take place in the exact degree in which taxation falls short of, or exceeds the standard of average expenditure.
- XII. The excess of revenue above expenditure is the only real sinking fund by which the public debt can be discharged. The increase of the revenue, or the diminution of expense, are the only means by which this sinking fund can be enlarged, and its operations rendered more effectual; and all schemes for discharging the national debt, by sinking funds operating by compound interest, or in any other manner, unless so far as they are founded upon this principle, are illusory.

THE progress and discharge of the debt of a nation are regulated by the same principles as those of an individual; and experience shows, that measures of public finance are often conducted with a degree of imprudence seldom exhibited in the management of private affairs. We may, however, extend our views to a greater length of time, in regard to the former.

It is true, that upon abstract principles, the smallest sum lent out for compound interest will, in length of time, increase to an indefinite magnitude:\* but it is obvious, that the improvement of money in that way would be limited, at a certain amount, by the want of demand from borrowers, and the impossibility of investing it in productive capital of any kind. It is restricted within a much narrower limit by the mutability of human measures, and the actual impossibility of adherence to the same system, conducted by successive trustees through many generations. It is true that if the system were invariably adhered to, the sum would increase at the rate which calculation points out, until it was limited by the impossibility of finding borrowers, or employing it in any profitable manner.

The system of accumulating a national treasure has been long laid aside, and is not likely to be revived. We may therefore dispense with any further consideration of nations storing up wealth, and bestow our attention on the actual case of nations labouring under debt; sometimes endeavouring to discharge it; often obliged to increase it.

Suppose an individual has contracted a certain extent of debt, and afterwards attains to circumstances which enable him to discharge it. If no oppressive and usurious measures be practised against him by his creditors, and if he pay the interest regularly, the sum which he must pay altogether, before he be clear of debt, is the amount of the money he borrowed, and the simple interest of each portion of the same, from the time of its

being borrowed to the time of its repayment. Suppose he borrows L.10,000, and that for ten years he pays the interest, but no part of the principal. If the rate of interest be 5 per cent, he pays during that time L.500 annually for interest, or L.5000 altogether; and if, by a sudden acquisition of wealth, he is able to discharge the debt at the end of ten years, he pays exactly L.15,000 altogether. But suppose, by an amelioration of his circumstances, he is enabled to pay L.1000 annually to his creditors, for principal and interest. The first year he pays L.500 for interest, and L.500 towards the discharge of the principal. The remaining debt is L.9500. and the interest of this being L.475, if he can pay L.1000 next year, he discharges L.525 of the principal. leaving a debt of L.8975. The interest of this is L.448 15s. and next year, by paying L.1000, he discharges L.551 5s. of the principal, and reduces the debt to L.8423 15s. If he continue to act in this manner, the whole debt will be discharged in about 144 years: and the whole sum which he pays, including the L.5000 paid during the first 10 years, is L.19,250 nearly, being the amount of the principal, of 10 years interest on L.10,000. of 11 years interest on L.9500, of 12 years interest on L.8975, of 13 years interest on L.8423 15s. and so on; altogether, the principal, together with the simple interest of each portion of the same, from the time that the debt was contracted, till the time that portion was repaid. If he can only spare L.750, and therefore discharge L.250 of the principal the first year, it will require somewhat above 22 years to discharge the whole; and if he can only spare L.600 and therefore discharge L.100 of the principal the first year, it will require 37 years. In all these cases, it is the surplus of L.500, of L.250, or of L.100, which the debtor can spare above the interest, that enables him to discharge the principal.

Instead of conducting the business in this manner, he may pay only the L.500 of interest to his creditors and lend out the other L.500 at interest, and lend again L.500 more at the end of the next year, and so on, accumulating the sums lent by compound interest, till it amount to L.10,000, and then discharge his whole debt at once. It will require exactly the same time of 142 years to accomplish this. If he transact the business himself, the second way will be attended with more trouble, but the result will be the same. If he employ an agent to transact the loans, he will be a loser by following the last mentioned method, to the extent of the fees paid for agency.

If the debtor be able to pay no interest during the first ten years, the creditors will either insist on accumulating the interest with the principal, in the manner of compound interest, or the debtor must borrow annually from other hands, to pay the interest annually to his original creditors, and must also borrow more each succeeding year, to pay the interest of the debts thus contracted. In either way, his debt at the end of ten years will amount to L.16,289, the interest of which being L.814 9s. an annual payment of L.1000 would discharge only L.185 11s. of the principal debt the first year, and would require about 35 years to discharge the whole, whether he pay the L.1,000 annually to his creditors to lessen the principal, after payment of the interest, or whether he accumulate the overplus by compound interest till he be able to pay the whole debt at once.

Substitute millions, or ten millions, for thousands, and the above reasoning is equally applicable to the public debt of a nation.

If the debt be ever discharged, which can only be done by a surplus revenue, and if the business be transacted as private affairs are, where the creditor is entitled to no more than the sum lent, together with the interest, the time required for the discharge of a public debt will be the same as that for a private one, when the proportion of surplus revenue is the same; and this holds whether the surplus be paid annually to the creditors, in discharge of part of the debt, so far as it will go, or accumulated in a sinking fund, in the hands of commissioners appointed for that purpose.

The whole sum paid to the public creditor, before the debt be discharged, is equal to the sum advanced by him, together with the simple interest of each portion of the same, from the time it was advanced to the time it is repaid, providing the interest be paid regularly from the time the debt is contracted: but if the payment of the interest be suspended for a certain time after the debt is contracted, then the whole sum paid is equal to the principal debt, together with the compound interest of the same, during the period of suspension, and the simple interest of each portion of this accumulated sum, from the time it is put in a train of payment, till that portion be paid.

But the manner in which our public debt is conducted is greatly more unfavourable to its repayment than in the case of private business. A certain capital in the 3 per cents. or other fund, is assigned to the public creditor for every L.100 advanced, according to the price of the funds at the time, and allowing always a profit to the lender. He is repaid according to the price of the funds at the time of repayment; and as the repayment is in time of peace, when the funds are always much higher than in time of war, the sum repaid is always much greater than the sum advanced, together, with the interest.

There is generally a collateral circumstance in favour alike of the public and private debtor, which was al-

ready mentioned in the illustration of the second general proposition, arising from the alteration of the value of money. In regard to either, if the interval between the time of borrowing and repaying be considerable, the nominal sum paid is likely to be of less real value than a like nominal sum at the time the debt was contracted.

Neither this advantage which the public debt possesses in common with the private one, nor the disadvantage which the public debt labours under from the above mentioned imprudent manner in which it is conducted, has any relation to the argument concerning the inefficacy of the sinking fund.

Let us next consider the case of a nation engaged in war, the expense of which it is unable or unwilling to bear during the year. Suppose the annual expenditure of the war, added to the peace establishment and interest of former debts, exceed the present revenue by 11 millions. That sum must be raised by loan, or additional taxes, and should be raised by the latter as far as the nation can hear them.

If no additional taxes be imposed, the annual loans of 11 millions will accumulate against the nation with all the disadvantages of compound interest.

If a sum less than the interest be raised by additional taxes, the loans will accumulate in some degree with the disadvantage of compound interest.

If a sum equal to the interest be raised by additional taxes, the nation will be burdened at the conclusion of the war, or at any period of its continuance, with a capital debt equal to the amount of the loans, and with additional perpetual taxes equal to the amount of the simple interest of the same.

Suppose the war to continue ten years, and the loans to be raised in the 5 per cents. at par. The whole sum borrowed will be 110 millions, and the interest of each loan being L.550,000, the whole additional interest will be L.5,500,000.

The surplus of the revenue, now burdened with this additional sum, above a peace establishment, is the only fund from which this debt can be discharged during a subsequent peace.

If a sum greater than the interest of the loan be raised by additional taxes, there will be less accumulation of capital; and the further taxation is carried, the more accumulation is restricted: but, until taxation is carried so far as to defray the expenses within the year, there will be a certain accumulation; and till it be carried so far as to confine the accumulation within the limit that may be reasonably expected to be discharged in a subsequent peace, the system will prove ultimately ruinous.

The restraint given to the accumulation of debt in any period, short or long, depends altogether upon the excess of the additional taxes above the interest of the loans; and it makes no difference whether they be considered simply as war taxes, or permanent taxes, according to future exigencies; or whether they be connected with a sinking fund of any kind.

Suppose L.610,000 is raised annually by additional taxes; as this does more than cover the interest of the loan, and part of it may be applied to the expense of the war, a less loan than L.11,000,000 will be sufficient, and the loan will be less in each succeeding year, so long as L.11,000,000 is the sum wanted.

The progress of the funded debt will be as follows, 'The first year L.550,000\* from the additional taxes

<sup>\*</sup> All the calculations in this inquiry, unless when otherwise mentioned, are made at 5 per cent. interest; the 3 per cent. funds are valued at 60, the 4 per cents. at 80, and the 5 per cents. at par.

being applied in payment of the interest of the loan, there will be a surplus of L.60,000 applicable to the service of the second year.

The loan required the second year will therefore be L.10,940,000, and the amount of the loans, in the two first years, L.21,940,000, the interest of which is L.1,097,000, and as L.610,000 more of additional taxes are imposed the second year, or L.1,220,000 in these two years, there will be a surplus, after paying the interest, of L.125,000 applicable to the service of the third year, and the loan required for that year will be L.10,877,000.

The amount of loans during these three years is therefore L.32,817,000, the interest thereof, L.1,640,850, the additional taxes imposed during these three years, L.1,830,000, affording a surplus of L.189,150, applicable to the service of the fourth year.

The progress during ten years is exhibited in the following Table.

Years.	Loan each year.	Amount of loans.	Amount interest.	Amount add. taxes.	Surplus.
1st	11,000,000	11,000,000	550,000	610,000	60,000
2d	10,940,000	21,940,000	1,097,000	1,220,000	123,000
3d	10,877,000	32,817,000	1,640,850	1,830,000	189,150
4th	10,810,150	43,627,850	2,181,393	2,440,000	258,607
5th	10,741,393	54,369,243	2,718,462	3,050,000	331,538
6th	10,668,462	65,037,705	3,251,885	3,660,000	408,115
7th	10,591,885	75,629,590	3,781,480	4,270,000	488,520
8th	10,511,480	86,141,070	4,307,043	4,880,000	572,947
9th	10,427,053	96,568,123	4,828,406	5,490,000	661,594
10th	10,338,406	106,906,529	5,345,326	6,100,000	754,674

Thus, at the end of ten years, when additional taxes are imposed annually to the extent of L.610,000, the amount of funded debt is L.106,906,529, instead of

L.110,000,000 which it would have been if the additional annual taxes had been only L.550,000.

If, instead of conducting the business in this manner, we trace the effects of the system, actually followed, of transferring L.1,200,000 annually from the public revenue to commissioners appointed for the reduction of the national debt, by whom also the interest of the sums redeemed are applied each succeeding year, in addition to the above mentioned sum, for its further redemption, the result will be found exactly the same.

As L.11,000,000 is annually wanted to complete the war expenses, and L.1,200,000, to be transferred to the commissioners, the annual loan must be L.12,200,000 and the amount of the loans in ten years, L.122,000,000.

The first year, L.1,200,000 of the debt is redeemed, leaving L.11,000,000 unredeemed.

The second year, L.60,000, the interest of the redeemed debt being added to the L.1,200,000, the sum applied by the commissioners for the redemption of the public debt is L.1,260,000, and this redeeming an equal sum in the 5 per cents. the whole sum redeemed the two first years is L.2,460,000, and the loans of these years being L.24,400,000, the unredeemed debt at the end of the second year is L.21,940,000.

The interest of the redeemed debt now amounts to L.123,000, which being added to L.1,200,000 gives L.1,323,000, applicable to the redemption of debt. The whole sum borrowed the first three years is L.36,600,000; the whole sum redeemed, L.3,783,000; and the unredeemed debt L.32,817,000.

The progress during ten years is as follows:

Loan each year.	Amount of Loans.	deemed		on debt	Debt re- maining un- redeemed.
1st 12,200,000 2d 12,200,000 3d 12,200,000 4th 12,200,000 6th 12,200,000 7th 12,200,000 8th 12,200,000 9th 12,200,000	24,400,000 36,600,000 48,800,000 61,000,000 73,200,000 85,400,000 97,600,000	1,260,000 1,323,000 1,389,150 1,458,607 1,531,538 1,608,115 1,688,520	2,460,000 3,783,000 5,172,150 6,630,757 8,162,295 9,770,410 11,458,930	123,000 189,150 258,607 331,538 408,115 488,520 572,947	43,627,850 54,369,243 65,037,705 75,629,590

Thus it appears that the amount of unredeemed debt at the end of ten years, when the system of the sinking fund is strictly followed, is L. 106,906,529, the same as the amount of the debt under equal expenditure and taxation when no sinking fund is established. It is the same every year of that period, and will remain the same for any length of time. The surplus of taxes applicable to the expense of the war on the one system answers to the interest of debt redeemed, applicable to its further redemption, on the other.

If, instead of funding in the 5 per cents. at par, the transactions be made in the 3 per cents. at L.166 13s. 4d. capital, for L.100 borrowed (and this is nearly what has been done,) the nominal sums funded and redeemed are increased in the proportion of 5 to 3, but no alteration is made in the interest, or the real value of the debt.

If the L.11,000,000 required yearly be funded in the 3 per cents, the capital funded is L.18,333,333, and if a sinking fund of 1 per cent. on this nominal sum be established for its redemption, the sum required to be raised by additional taxes yearly for that purpose is L.183,333. This will have a greater effect in preventing accumula-

tion or increasing the sum redeemed than a surplus of L.60,000 in proportion to the sums: but the reasoning adduced in regard to the one is equally applicable to the other.

We have now examined the supposed effects of sinking funds, in the cases of diminishing debt during peace, and of increasing debt during war, with a degree of prolixity which so clear a subject little required, had not the efficacy of a sinking fund, and omnipotence of compound interest been strongly urged by respectable authority, and taken possession of the public mind, and influenced the public measures of finance for a course of years.

We trust we have demonstrated their futility. No person ever doubted that increase of taxation, and saving of expenditure, are means of retarding the accumulation of debt. We ought to embrace the former as far as we are able, and the latter, as far as safety permits: but the point at issue is, whether, taxation and expenditure being the same, a sinking fund produces any beneficial effect.

If a period of peace were protracted till the public debt were discharged, the taxes might and would be diminished to the limit of a peace expenditure, for no person now thinks of accumulating national treasure for future purposes. If the periods of war and peace be so related, that the debt contracted in the former be discharged in the latter, the amount of the debt vibrates, and this system may go on for an unlimited length of time: but, if more debt be contracted every war, than is discharged in the subsequent peace (and this has hitherto been the real case,) and if the accumulation be in a greater proportion than the increase of national wealth, there is a limit beyond which the system cannot be supported.

### Section 1

## PART II.

HISTORY OF THE PUBLIC DEBT OF GREAT BRITAIN.

#### SECTION I.

Progress and Manner of Conducting the Funded Debt.

THE funding system commenced at the Revolution. The debt existing at that time was inconsiderable, and not reduced to any regular form. During the war waged by king William against the abdicated monarch, and the king of France who supported his claims, it was found impracticable to raise the requisite sums within the year, and recourse was had to loans; for discharging which taxes were imposed, to continue for a limited number of years; it being expected that the produce of these taxes would discharge the debts in the periods for which they were granted. These expectations were not realized, and the taxes were afterwards rendered perpetual. Loans were also raised during that war on annuities for lives, on very high terms, 14 per cent. being granted for single lives, 12 per cent. for two lives, and 10 per cent. for three lives: and the amount of the public debt at its termination by the peace of Ryswick. in 1697, was L.21,515,742.

The legal rate of interest at the commencement of the

funding system was 6 per cent., and it was reduced in the year 1714 to 5 per cent.\* The rate of interest granted for the public debt has been often higher than the legal rate: but instead of assigning capital to the public creditor equal to the sum borrowed, and a rate of interest which it could be procured for, according to the circumstances of the times, the practice has generally been to fix upon a low rate of interest, and assign to the public creditor a capital larger than the sum borrowed. The greater part of the loans has been made in funds bearing 3 per cent. interest on the nominal capital, some in a fund at 4 per cent. and some in one at 5 per cent.

Some loans have been contracted altogether on annuities for lives or years: but most of these annuities, which at present amount to a large sum, have been granted as a collateral advantage to the public creditor, who received the greater part of his recompence in a capital bearing interest at three, four, or five per cent.

Annuities for lives have sometimes been granted upon schemes called *Tontines*, in which the benefit of survivorship is allowed. The subscribers to these schemes appoint nominees, who are divided into classes, according to their ages, and a suitable annuity is assigned to each; and when some of the lives fail, the amount of the annuities appertaining to each class is divided among the survivors, so long as any remain, or at least till the annuity amount to a large sum, according to the terms of the scheme.

Tontines seem adapted to the passions of human nature, from the hope every man entertains of longevity, and the desire of ease and affluence in old age; and they are beneficial to the public, as affording a discharge of the debt, although a distant one, without any payment. They have been extensively adopted in some foreign countries, but seldom in Britain. The last, and almost the only scheme of this kind now subsisting among us is that of 1789. Although the sum proposed to be raised in this way was only L.102,500, the persons who contracted with government for the whole were unable to complete it without loss; and an alternative was afterwards allowed them of a long annuity.\*

The annuities for fixed terms now existing (called Long Annuities) all terminate at the same time, in 1860. The first of these was granted in the year 1761, being an annuity of L.1 for 99 years, upon every L.100 subscribed to the loan of L.11,400,000 contracted that year, in addition to the permanent annuity of L.3 on a capital equal to the sum subscribed. Many other annuities of this kind have been since granted, and all of them for such periods as to terminate at the same time. The amount of these annuities for Britain, on the 1st February, 1813, was L.1,140,601, and, except what was granted in place of the tontine of 1789, they are all in addition to the perpetual annuities on the capitals of the loans.

Another collateral advantage has sometimes been granted to the public creditors from lotteries. Tickets have been granted to the subscribers to the loans on terms considered as beneficial, and instead of paying money to the holders of the fortunate tickets, the prizes were assigned them in capital stock of that kind in which the loan of the year was funded. This method was followed in most of the loans during the seven years war, from 1756 to 1763. During the subsequent peace, the lotteries were several times connected with the schemes adopted

for discharging a part of the public debt. In the lottery of 1769, the prizes were paid in money. In 1776, on the eve of the American war, the system of funding the lottery prizes was revived; but, in the subsequent lotteries during that war, the prizes were paid in money, and the tickets granted to the subscribers, as an encouragement to the loans, for a price equal to the sum distributed in prizes.

The profit which the public draws from lotteries may be considered as a tax on the spirit of gaming, and added to the amount of the other taxes. In order to secure all that can be raised this way to the public, private lotteries are prohibited under heavy penalties: but a lottery was granted in 1758 for the benefit of the British Museum, and a few others have been granted since for private purposes.

Although the public creditor cannot demand payment of the capital debt,\* the mode of transferring it even in small sums, is so conveniently arranged, and the dividends so regularly paid, that it is considered as an eligible property. The value of the funds is liable to considerable fluctuation. It depends chiefly upon the proportion between the interest they bear, and the profit which may be obtained by applying capital to other purposes. It is influenced by the plenty or scarcity of capital, and by the amount of the loan required at the time; and it is impaired by any event which threatens the safety, or weakens the credit of government. It is always much higher in time of peace than in time of war; and is affected by every event and even by every report, in time of war, favourable or unfavourable. False reports are frequently raised by designing people for that pupose.

The Loyalty Loan is an exception from this.

In the early part of the funding system, a separate account was kept of each loan, and of the tax imposed for payment of the interest. This method was afterwards found inconvenient, as the produce of some of the taxes fell short of the expected sum, while that of others exceeded it, and the multiplicity of funds produced confusion. This gave occasion, soon after the peace of Utrecht, to unite the various branches of the revenue into a few funds. The Aggregate Fund was established in 1715, and the South Sea and General Funds in the following year. To each of these funds a variety of branches of revenue were appropriated, comprehending altogether the whole revenue existing at the time, except the land-tax and malt-tax of sixpence per bushel, and the branches then appropriated to the support of the civil government:\* and each of them were charged with the payment of certain annuities then due by the public. The united surplus of these funds formed the basis of the sinking fund established in 1716, a particular account of which will be given afterwards.

The funded capital has also been increased in a manner different from loans. Exchequer and Navy Bills have been funded to a great extent: that is, instead of paying these bills, capital in one or more funds has been assigned to the holder, on such terms as they were willing to accept of.

\* See Note VII.

The amount of the National Debt at the Revolution, and at the commencement and termination of each war since, has been as follows:\*

National debt at the Revolution, - 1689  — at the peace of Ryswick, - 1697	21,515,742
— at the commencement of the war, 1701	16,394,701
— at the peace of Utrecht, 1714	53,681,076
— at the commencement of the war, 1740	46,449,568
Funded debt at the peace of Aix-la-Chapelle, 1748	78,293,313
- at the commencement of the war, 1756	72,289,673
- at the peace of Paris, 1763	133,959,270
including what was contracted in the sub-	
sequent years to discharge arrears.	
- at the commencement of the American	1.0
war, 1775	122,963,254
- at the peace of Versailles, 1783	238,231,248
including what was funded in the subse-	
quent years.	
And this being reduced by purchases made	
by the Commissioners for the redemp-	
tion of the national debt, there remained	
unredeemed at the commencement of the	
war, 1793	227,989,148
Funded debt at the peace of Amiens, 1802 including the loan of that	
year, L.567,008,978	
Of which redeemed, - 67,225,915	
51 ····································	499,753,063
There was no reduction of the national debt	100,,00,000
during the short peace which followed the treaty of Amiens.	
Funded debt, 1st February, - 1813	
L.812,013,135	
Of which redeemed, or con-	
verted into life annuities, 212,422,938	
,	599,590,197

<sup>\*</sup> There are differences in the published statements of the amount of the national debt at some of these periods; but not of such magnitude as to affect the general view of the subject.

In this statement the value of Annuities granted for years or lives is not included.

Debt at the Revolution,			·		1,054,925	Annual average.
Contracted in war comme	ncing	1689	of 8ve	are	20,460,817	2,557,602
- in war comme						
- in war comme	ncing	1740.	of 8ve	ars.		
in war comme						8,809,942
- in war comme						
- in war comme						
- in war comme				,	-,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	30,200,000
to 1st Feb			10 v	ears.	99,837,134	9.983.713
10 101 1 10		,	_	1		0,000,110
Years of w	ar,		63		638,129,577	10,129,040
			_			
Debt paid in peace of		1697,	of 4 ye	ears,	5,121,041	1,280,260
- in peace of	-	1714,	of 26 ye	ears,	7,231,508	278,135
- in peace of	-	1748,	of 8 ye	ears,	6,003,640	750,455
- in peace of	-	1763,	of 12 ye	ears,	10,996,016	916,334
- in peace of			of 10 ye			1,024,210
- in peace of			of 1 y		, ,	, ,
Years of p	eace,	-	61		39,594,305	649,087
	1		-			
Debt at the Revolution,					1,054,925	
Debt contracted in sever	ı war	S		-	638,129,577	
		,				
					639,184,502	
Debt paid in five period:	s of n	eace.			39,594,305	
		,				
Funded debt 1st Februar	v 181	3. incl	uding	what		
is transferred for land-	tax.		- 8		599,590,197	1
	-,				-	

The terms of the Loans, and amount of money borrowed, and capital funded, during the seven years war, were as follows:\*

1 1	Sums bor- rowed.	Capital funded.
1755 At 3 per cent. by lottery, 1756 At 3½ per cent. redeemable after	900,000	900,000
15 years, and redeemed in 1771, Also at 3 per cent. by lottery, 1757 At 3 per cent. with an additional life annuity of L.1. 2s. 6d. per	1,500,000 500,000	
L. 100 borrowed, 1758 At 3½ per cent. reduced, in 1782,	3,000,000	3,000,000
to 3 per cent.	4,500,000 500,000	
Also at 3 per cent. by lottery, 1759 At 3 per cent. allowing L.115	,	(100)
capital for L.100 borrowed, 1760 At 4 per cent. for 21 years, and	6,600,000	7,590,000
and allowing L.103 capital for		
L.100 borrowed, 1761 At 3 per cent. with an additional	8,000,000	8,240,000
annuity of L.1. 2s. 6d. for 99 years, Also at 3 per cent. by lottery,	11,400,000 600,000	11,400,000 600,000
1762 At 4 per cent. irredeemable for 19 years, and then reduced to 3 per cent. with an annuity of L.1 for 98 years,	12,000,000	12,000,000
1763 At 4 per cent. with the profit of a lottery ticket, valued at L.10 for L. 100 borrowed, Also at 4 per cent. by lottery,		2,800,000
~ -	53,000,000	54,230,000
And the following additions were made to the funded debt, after the peace, to discharge the ar- rears of the war,		
Navy bills funded 1765,	1,482,000	1,482,000
Loan of 1766, at 3 per cent. Loan of 1767, at 3 per cent.	1,500,000 1,500,000	1,500,000 1,500,000
Loan of 1768, at S per cent.	1,900,000	1,900,000
Min to	59,382,000	60,612,000
	w	

# The loans during the American war were\*

	Sums bor- rowed.	Capital funded.
1776 At L.107. 10s. in the 3 per cents. 1777 At par in the 4 per cents. with an additional annuity of 10s.	2,000,000	2,150,000
for ten years.  1778 At par in the 3 per cents. with an annuity of L.2. 10s. for	5,000,000	5,000,000
30 years, or for lives, in the option of the subscribers, 1779 At par in the 3 per cents, with	6,000,000	6,000,000
an annuity of L.3. 15s. for 29 years, or for lives, 1780 At par in the 4 per cents. with	7,000,000	7,000,000
an annuity of L1. 16. 3d. for 80 years,	12,000,000	12,000,000
3	32,000,000	32,150,000
1781 At L.150 in the 3 per cents and L.25 in the 4 per cents.	12,000,000	21,000,000
1782 At L.100 in the 3 per cents. and L.50 in the 4 per cents. with an annuity of 17s. 6d. for 78 years,	13,500,000	20,250,000
1783 At L.100 in the 3 per cents, and L.25 in the 4 per cents, with an annuity of 13s. 4d. for 77		
years, 1784 At L.100 in the 3 per cents. and L.50 in the 4 per cents. with	12,000,000	15,000,000
an annuity of 5s. 6d. for 75½ years, L.2000 being deducted for	6,000,000	8,998,000
the failure of a subscriber, 1784 Navy and victualling bills fund-	75,500,000	97,398,000
ed in the 5 per cents. at L.107. 10s. 6d. per cent. 1785 Navy, victualling, and trans-	6,397,900	6,879,342
port bills, and ordnance de- bentures funded in the 5 per		-
cents. at L.111. 8s. per cent.	9,865,942	10,990,651
	91,763,842	115,267,993

The whole funded debt of Great Britain in 1786 was - - - L.238,231,248

Annuities for terms of years, or for lives, - L.1,193,674

At that time the Sinking Fund, now existing, was established, and part of the funded debt has been since annually redeemed. In order to exhibit a distinct view of this subject, we shall first state the progress and present amount of the funded debt, and charges on the same, without regard to the redemption; and then the extent of the redemption, and the amount now unredeemed.

At the commencement of the war in 1793, the capital funded debt was the same as in 1786, and consisted of 3 per cents. L.187,611,255 4 per cents. \$2,750,000 5 per cents. 17,869,993 Amount funded debt.\* -- L.238,231,248 Of which redeemed by the Sinking Fund, in 3 per cents. 10,242,100 Unredeemed debt. L.227,989,148 Interest on 3 per cents. - L.5,628,338 on 4 per cents. 1,310,000 893,499 on 5 per cents. L.7,831,837 Amount interest, And the annuities, to which some additions were made since 1786, were Short annuities which expire in 1805 L.53,655

Carried forward.

in 1806

in 1807

in 1808

7,776

14,892

413,333 ——— L.494,656

<sup>\*</sup> See a statement of the several funds in which this capital was invested, in Table I.

Brought forward, - L.494,656 Long annuities which expire in 1860 704,740	L.7,831,837
L.1,199,396	
Tontine 6 Geo. III L.540	
29 Geo. III 18,442	1.
L.18,982	
Annuities for lives,* - 75,492	
—— 94,474	
	1,293,870
Management of capital debt, - L.98,869	
of annuities, 17,258	
	116,127
Interest, annuities, and management, -	L.9,241,834
Deduct interest redeemed,	- 307,263
Remainder unredeemed,	L.8,934,571

Since the commencement of the war, loans have been contracted every year, and Exchequer and Navy Bills have been frequently funded. A part of most of the loans since 1797 has been for the use of Ireland, and in 1809, a part was for Portugal. Some loans have been transacted in Britain for Ireland, which though not connected with any British loan, are guaranteed by Britain, and the interest payable there. The particulars of these operations are as follows:

A. Loan, sum raised,	- 4	-		L.4,500,000
Sum funded at the rat		0 in 3 j	er cen	
cons. for L.72 raise	d, -		-	L.6,250,000
Interest, -	-	-		L.187,500
Management L.450 p	er millio	n, -		- 2,812
Total charge, -				L.190,312

## 1794.

D T 1 1 000 000
B. Loan, sum raised, L.11,000,000
funded at L.100, in 3 per cent. cons L.11,000,000
and L.25 in 4 per cent. cons 2,750,000
Total funded, L.13,750,000
Interest of 3 per cents L.330,000
of 4 per cents 110,000
014 per cents 110,000
L.440,000
And an annuity of 11s. 5d. for 661 years, - 62,799
Management of capital, at L.450, L.6,187
and for long annuities, 706
6,894
Total charge, L.509,687
C. Navy and victualling bills funded, amount L.1,907,451
Sum funded at L.101 in 5 per cent. cons L.1,926,526
Interest, L.96,326
Management at L.450, 867
Total charge, L.97.193
Total charge, L.97,193
10tai charge, 1.97,198
1795.
1795.
1795.
1795. D. Loan, sum raised, L.18,000,000
1795. D. Loan, sum raised, L.18,000,000  Funded at L.100 in 3 per cent. cons L.18,000,000
1795. D. Loan, sum raised, L.18,000,000
1795. D. Loan, sum raised, L.18,000,000  Funded at L.100 in 3 per cent. cons L.18,000,000
1795.  D. Loan, sum raised, L.18,000,000  Funded at L.100 in 3 per cent. cons L.18,000,000  and L.33 6s. 8d. in 4 per cent. cons 6,000,000
1795.  D. Loan, sum raised, L.18,000,000  Funded at L.100 in 3 per cent. cons L.18,000,000  and L.33 6s. 8d. in 4 per cent. cons 6,000,000
Total funded, L.18,000,000  Total funded, L.24,000,000  Interest in 3 per cents L.540,000
Total funded,  Interest in 3 per cents.  1795.  L.18,000,000  L.18,000,000  L.18,000,000  L.18,000,000  L.24,000,000  L.24,000,000  L.24,000,000  L.24,000,000  L.24,000,000  L.24,000,000  L.24,000,000
Total funded, L.18,000,000  Total funded, L.24,000,000  Interest in 3 per cents L.540,000

Brought forward, L.780,000
And an annuity of 9s. 6d. for 654 years, - 85,500
Management of capital, at L.450, L.10,800
and for long annuities, 962
11,762
Total charge, L.877,262
Total charge,
E. Navy and victualling bills funded, amount L.1,490,647
12. Ivavy and victualing bins funded, amount 12.1,430,047
Y
Sum funded at L.108 in 5 per cent. cons. L.1,609,898
Interest, L.80,495
Management at L.450, 724
,
Total charge, L.81,219
10tal charge, 15.01,215
T 10 000 000
F. Loan, (Dec.) sum raised, L.18,000,000
Sum funded at L.120 in 3 per cent. cons. and
L.25 in 3 per cent. reduced, - L.26,095,800
N. B. A deficiency by non-payment of - 4,200
L.26,100,000
Interest, L.782,874
And an annuity of 6s. 6d. for 64 <sup>1</sup> / <sub>4</sub> years, - 58,500
Management of capital at L.450, L.11,743
and for long annuity, 658
12,401
12,101
Total charge, L.853,775
,
1796.
G. Loan. Sum raised, L.7,500,000
7,7
Sum funded at L.120 in 3 per cent. cons. and
L.25 in 3 per cent. reduced, - L.10,793,,825
1
N. B. A deficiency by non-payment of - 81,175
L.10,875,000
12.10,07 0,000

60	INQUIRY (	CONCERNIN	G THE	
Managem	nnuity of 5s. 6 ent of capital a d for long annu	t L.450,	ears, L.4,857 231	L.323,815 20,582 5,089
			V	L.349,486
H. Navy and	victualling bill	s funded, ar	nount	L.4,226,727
	L.2,398,927 ${}^{6}$ d 1,827,800 fur	unded at L. 5 per cent ded at L.10	. cons. 5	L.2,494,884
1.250		cording to th	eir dates,	1,919,190
100	1.4,226,727	1 7		L.4,414,074
Interest, Manageme	ent at <b>L.</b> 450,			L.220,703 1,986
Total cl	harge, -			L.222,689
I.	1796 Navy and Exc	i. (Nov.) chequer Bills	s funded.*	1,00 111
100		Navy Bills.	Exch. Bills.	Total.
Amount bills,		11,595,529	1,433,870	13,029,399
	er cent. cons. er cent. cons. er cent. cons.	16,438,175 765,428 2,034,890	104,432	18,437,874 869,860 2,305,092
Total funded,		19,238,493	2,374,333	21,612,826
	per cents. per cents. per cents.	493,145 30,617 101,744	59,991 4,177 13,510	553,136 34,794 115,254
Amount intere Management a		625,507 8,657	77,678 1,069	703,185 9,726

<sup>\*</sup> See Note XI.

K. LOYALTY LOAN.* (Dec.)	Sum raised,	L.18,000,000
Funded at 5 per cent. in : L.112. 10s.	a separate fund at	L.20,124,843
N. B. A deficiency by non	-payment of	125,157
	400	L.20,250,000
Interest,	A CONTRACTOR	L.1,006,243
Management at L.450,	100	9,056
Total charge, -		L.1,015,299
17 m 1 m 1 m 1 m 1 m 1 m 1 m 1 m 1 m 1 m	797	

L. Joint loan for Britain and Ireland, funded at L.125 in 3 per cent. cons. L.50 in three per cent. reduced, L.20 in 4 per

cent. cons. and an annuity of 6s. for 623 years.

	Britain.	Ireland.	Total.
Sums raised,	13,000,000	1,500,000	14,500,000
Sums funded in 3 per cents. in 4 per cents.	22,750,000 2,600,000		25,375,000 2,900,000
Total funded,	25,350,000	2,925,000	28,275,000
Interest in 3 per cents in 4 per cents	682,500 104,000	78,750 12,000	
Amount interest, Long annuities, Management of capital at L.450, And for long annuities,	786,500 39,000 11,418 446	90,750 4,500 1,305 44	877,250 43,500 12,723 490
The state of the state of	837,364	96,599	935,963

<sup>\*</sup> See Note XII.

M. Joint loan for Britain and Ireland, funded at L.150 in 3 per cent. cons. L.50 in 3 per cent. reduced, and an annuity of 4s. 11d. for 613 years.

	Britain.	Ireland.	Total.
Sums raised,	15,000,000	2,000,000	17,000,000
Sums funded in 3 per cents.	30,000,000	4,000,000	34,000,000
Interest, Long annuities, Management of capital at	900,000 36,875		1,020,000 41,791
L.450, And for long annuities,	13,500 415	1,800 55	15 <b>,</b> 300 470
Total charge,	950,790	126,771	1,077,561
N. Loan. [December.] Sur	n raised,	- I	3,000,000
Sum funded at L.100 in 3 L.87. 9s. 6d. in 3 per co			5,624,250
Interest, Management at L.450,			L.168,727 2,530
Total charge, -	D. 4		L.171,257
	1799.		

O. Joint loan for Britain and Ireland, funded at L.125 in 3 per cent. cons. and L.50 in 3 per cent. reduced.

	Britain.	Ireland.	Total.
Sums raised,	12,500,000	3,000,000	15,500,000
Sums funded in 3 per cents.	21,875,000	5,250,000	27,125,000
Interest, Management at L.450,	656,250 9,843	157,500 2,362	
Total charge,	666,093	159,862	825,955

P. Joint loan for Britain and Ireland, funded at L.110 in 3 per cent. cons. and L.47 in 3 per cent. reduced.

	Britain.	Ireland.	Total.
Sums raised,	18,500,000	2,000,000	20,500,000
Sums funded in 3 per cents.	29,045,000	3,140,000	32,185,000
Interest, Management at L.450	871,350 13,070		
Total charge,	884,420	95,613	980,533

1801.

Q. Joint loan for Britain and Ireland, funded at L.125 in 3 per cent. cons. and L.50. 15s. in 3 per cent. reduced.

Britain.	Ireland.	Total.
25,500,000	2,500,000	28,000,000
44,816,250	4,393,750	49,210,000
		1,476,300 22,144
1,364,655	133,789	1,498,444
	25,500,000 44,816,250 1,344,488 20,167	25,500,000 2,500,000 44,816,250 4,393,750

1802.

R. Exchequer bills funded at L.25 in 3 per cent. cons. L.25 in 3 per cent. reduced, L.50 in 4 per cent. cons. L.25 in 5 per cents. joined to Loyalty Loan, and an annuity of 10s. 9d. for 58\$\frac{3}{2}\$ years.

Amount bills funded, - - - L.8,910,450

Sum funded in 3 per cents	-	4,455,225
in 4 per cents		4,455,225
in 5 per cents. Loyalty Loan,	)	2,227,612

L.11,138,063

Interest in 3 per cents in 4 per cents	1,439	L.133,657 178,209
in 5 per cents	and a	111,381
		L.423,247
Long annuities,		7,796
Management of capital at L.450,	L.5,012	
And for long annuities,	87	
5		5,099
		T 406 140
Total charge,		L.436,142

S. Joint loan for Britain and Ireland, funded at L.65 in 3 per cent. cons. L.60 in 3 per cent. reduced, and L.6 19s. 3d. in 3 per cent. cons. the interest of which is deferred till the

year 1808.\*

	Britain.	Ireland.	Total.
Sums raised,	23,000,000	2,000,000	25,000,000
Sums funded in 3 per cents. Besides stock deferred,	28,750,000 1,601,375	2,500,000 139,250	31,250,000 1,740,625
Total funded, -	30,351,375	2,639,250	32,990,625
Present interest, Deferred interest, -	862,500 48,041	75,000 4,178	937,500 52,219
Total interest,	910,541	79,178	989,719
Management at L.450,	12,937	1,125	14,062
Amount present interest and management,	875,437	76,125	951,562

<sup>\*</sup> See Note XIII.

T. Joint loan for Britain and Ireland, funded at L.80 in 3 per cent. cons. L.80 in 3 per cent. reduced, and an annuity of 6s. 5d. for 563 years

	Britain.	Ireland.	Total.
Sums raised,	10,000,000	2,000,000	12,000,000
Sums funded in 3 per cents.	16,000,000	3,200,000	19,200,000
Interest, Long annuities,	480,000 52,083	96,000 6,417	576,000 38,500
Management of capital at L.340, And for long annuities,	5,440 278	1,088 54	6,528 327
Total charge,	517,796	103,559	621,355

# 1804.

U. Joint loan for Britain and Ireland, funded at L.100 in S per cent. reduced, and L.82 in S per cent. cons.

	Britain.	Ireland.	Total.
Sums raised,	10,000,000	4,500,000	14,500,000
Sums funded in 3 per cents.	18,200,000	8,190,000	26,390,000
Interest, Management at L.340,	546,000 6,188		791,700 8,973
Total charge	552,188	248,485	800,673

V. Joint loan for Britain and Ireland, funded at L.150 in 3 per cent. cons. and L.22 in 3 per cent. reduced.

	Britain.	Ireland.	Total.
Sums raised,	20,000,000	2,500,000	22,500,000
Sums funded in 3 per cents.	34,400,000	4,300,000	38,700,000
Interest, Management at L.340, -	1,032,000 11,696		1,161,000 13,158
Total charge,	1,043,696	130,462	1,174,158
W. A separate loan for Irela 5 per cent. cons. and an a Sum raised, - Sum funded in 5 per cent.	nnuity of <b>I</b> -	.5 for 54	
Interest,	No.		L.18,000 75,000
Long annuities,  Management of capital at  and for long annui	L.340, -	L.122 } 638 }	760
Total charge, .	7.00	S 2	L.93,760

# 1806.

X. Joint loan for Britain and Ireland, funded at L.100 in S per cent. cons. and L.66 in 3 per cent. reduced.

44.0	Britain.	Ireland.	Total.
Sums raised,	18,000,000	2,000,000	20,000,000
Sums funded in 3 per cents.	29,880,000	3,320,000	33,200,000
Interest, Management at L.340	896,400 10,159		
Total charge,	906,559	100,729	1,007,288

Y. Joint loan for Britain and Ireland, funded at L.70 in 3 per cent. cons. L.70 in 3 per cent. reduced, and L.10. 12s. in 5 per cent. cons.\*

	Britain.	Ireland.	Total.
Sums raised, -	{ 12,000,000 } 200,000 }	2,000,000	14,200,000
Sums funded in 3 per cents in 5 per cents.	{ 16,800,000 } 280,000 } { 1,272,000 } 21,200 }		19,880,000 1,505,200
Total funded, -	18,373,200	3,012,000	21,385,200
Interest in 3 per cents.	\$ 504,000 \\ 8,400 \\	84,000	596,400
in 5 per cents.	63,600 } 1,060 }	10,600	75,260
Total interest, - Management at L.340,	577,060 { 6,145 } 102 }	94,600 1,024	, ,
Total charge, -	583,307	95,624	678,931

Sum raised, - - - L.1,500,000

Sum funded at L.160. 12s. 10d. in 3 per cent.

cons. - - L.2,409,625

Interest, - - - L.72,289

Z. A separate loan for Ireland in Britain.

Management at L.340, - - - 819

Total charge, - - - L.73,108

A. Joint loan for Britain and Ireland, funded at L.118. 3s. 6d. in 4 per cent. cons.

in 4 per cent. cons.			
	Britain.	Ireland.	Total.
Sums raised,	8,000,000	2,500,000	10,500,000
Sums funded in 4 per cents.	9,454,000	2,954,375	12,408,375
Interest, Management at L.340, -	378,160 3,214		
Total charge,	381,374	119,179	500,558
B. Exchequer Bills funded. Bills funded at L.105 in 5 Bills funded at L.63 in 5 and L.50 in 4	per cents.	3	<b>L.</b> 3,524,200
Amount Bills,		- 1	L.4,000,000
Sums funded in 5 per cen	at. cons.	-	L.3,700,410 300,944
Sum funded in 4 per cent	c. cons	0.4	L.4,001,354 237,900
Total funded, -	63	-	L.4,239,254
Interest at 5 per cent. at 4 per cent.	iš,		L.200,068 9,516
Total interest, - Management at L.340,			L.209,584
Total charge,		7	L.211,025
Interest of part of the loc till this year,* -	n of 1802,	deferred	L.48,041

<sup>\*</sup> See Note XIII.

L.8,253,644

#### 1809.

C. Joint loan for Britain, Ireland, and Portugal, funded at L.60 in 3 per cent. reduced, L.60 in 4 per cent. cons. and an annuity of 8s. 10d. for 503 years.\*

	Britain.	Ireland.	Portugal.	Total.	
Sums raised, -	11,000,000	3,000,000	600,000	14,600,000	
Sums funded in 3 per cents in 4 per cents.	6,064,478 6,960,000	1,800,000 1,800,000	895,522	8,760,000 8,760,000	
Total funded, -	13,024,478	3,600,000	895,522	17,520,000	
Interest at 3 per cent. at 4 per cent.	181,934 278,400		26,866	262,800 350,400	
Total interest, - Long annuities, - Management, -	460,334 51,233 4,864	13,250	26,866 304	613,200 64,483 6,505	
Total charge, -	516,431	140,587	27,170	684,188	

D. Exchequer Bills funded.†

Bills funded at L.103. 5s. in 5 per cents.

Bills funded at L.81. 8s. in 5 per cents.

and L.26. 5s. in 4 per cents.

Amount bills funded,

Sums funded in 5 per cent. cons.

and,

L.6,483,200

1,448,900

L.7,932,100

L.6,693,904

1,179,404

L.7,873,308

Sum funded in 4 per cent. cons.

Total funded,

<sup>\*</sup> See Note XV. † See Note XVI.

Interest in 5 per cents in 4 per cents	L.393,665 15,214
Total interest, Management at L.340,	L.408,879 2,806
Total charge,	L.411,685
Exchequer Bills funded.  Amount bills funded at L.103. 5s, in 5 per cent cons.	2.8,311,000
	2.8,581,108
	L.429,055
Management at L.340 and L.300,	2,917
Total charge,	L.431,972

F. Joint loan for Britain and Ireland, funded at L.130 in 3 per cent. reduced, and L.10. 7s. 6d. in 3 per cent. cons.

	Britain. Ireland.		Total.	
Sums raised,	8,000,000	4,000,000	12,000,000	
Sums funded in 3 per cents.	11,230,000	5,615,000	16,845,000	
Interest, Management	336,900 3,818			
Total charge,	340,718	170,359	511,077	

G. A separate loan for Ireland in Britain, funded at L.130, in 5 per cents. reduced; and L.10. 7s. 6d. in 3 per cent. cons. Sum raised, L.1,400,000

	District Michael Manage	* L
	Sum funded in 3 per cents L.	1,965,250
	Interest,	L.58,957 667
	Total charge,	L.59,624
	1811.	
ī.	I. Exchequer Bills funded.	
	Amount bills funded at L.103. 14s. in 5 per	
	cent. cons L.	7,018,700
	Sum funded, L.	7,278,392
	Interest at 5 per cent ]	L.363,919
	Management,	2,385
	Total charge, ]	L.366,304
	Loan to complete L.12,000,000.	
•		4,981,300
u	um funded in 5 per cent. cons. at L.72 for I70	
		5,166,319
		L.258,316
	Management,	1,550
	Total charge,	L.259,866
c.	C. Loan of L.12,000,000, of which L.4,500,000 is for vice of Ireland. But as Britain is engaged to parest, the whole is charged to the account of Brita Sum raised,	y the inte-

	Sum funded at L.100 in 3 per cent. reduced,	L.12,000,000
	and L.20 in 3 per cent cons.	2,400,000
		L.14,400,000
	and L.20 in 4 per cent. cons.	2,400,000
	Total funded,	L.16,800,000
	Interest at 3 per cent	L.432,000
	at 4 per cent.	- 96,000
	Total interest,	L.528,000
	Annuity for 483 years, at 6s. 11d.	- 41,500
	Management,	5,392
	Total charge,	- L.574,892
	1812.	
L.	Exchequer Bills funded, amount -	L.5,431,700
	Capital funded at L.108 in 5 per cent. cons	. L.5,866,236
	Interest at 5 per cent	L.293,312
	Management,	- 1,760
	Total charge,	- L.295,072
M.	Exchequer Bills funded, and loan in supplement, amount	L.6,789,625
	Capital funded at L.108 in 5 per cent. cons.	L.7,332,795
	Interest at 5 per cent Management,	L.366,639 - 2,200
	Total charge,	L.368,839

N. Joint loan for Britain, Ireland, and the East India Company, funded at L.120 in 3 per cent. reduced, and L.56 in 3 per cent cons.

0.00	Britain.	Ireland.	East India Company.	Total.
Sums raised,	15,650,000	4,350,000	2,500,000	22,500,000
Capital funded,	27,544,000	7,656,000	4,400,000	39,600,000
Interest at 3 per ct. Management,	826,320 8,263			
Total charge,	834,583	232,094	133,320	1,199,997

The loan in 1811 marked I, and that in 1812 marked M, were partly made in Exchequer Bills.

In 1809, an option was given to the holders of the 3 per cent. capital, to convert their perpetual annuities into life annuities, at certain rates, according to the age of the annuitant. In consequence of this, L.1,961,582 of the 3 per cent. capital was converted into life annuities before 5th January, 1813, amounting to L.140,332, and reduced by death at that time to L.135,675. These annuities were charged on the sinking fund, and the dividend, discharged by the extinction of the capital, amounting to L.53,847, applied to that fund.

An abstract of all these operations, together with the amount of the public debt, and the charge on the same at the commencement of the war, 1793; at the peace of Amiens, 1802; and on the 1st February, 1813, is exhibited in Table II.

It appears that the amount of the funded debt of Britain at the peace of Amiens, was,

In the 3 per cents.	_			-	I	.467,105,854
In the 4 per cents.			-		•	49,425,085
In the 5 per cents.	-			-		50,478,039

Amount of funded capital, - L.567,008,978

Interest on above, -		-	L.18,466,040
Annuities for years or lives,	-		1,604,915
Charges of management, -		-	- 266,870
Amount of annual charge,	-		L.20,337,825
And on the 1st February, 1813, th	he am	ount of fi	unded debt was,
In the 3 per cents	-	-	L.647,368,983
In the 4 per cents	-	-	68,857,321
In the 5 per cents.	-	-	93,825,249
Amount of funded capital,	-	-	L.810,051,553
Interest on above, -		-	L.26,866,625
Long annuities which termi	nate i	in 1860,	
	L.1,	140,601	
Annuities for lives,* -	-	65,571	
Ditto for capital converted,		135,673	
			1,341,847
Charges of management,†	-	-	- 214,154
Amount of annual charge,	~	٠.	L.28,422,626

# IRISH FUNDED DEBT.

WE have already noticed that part of most of the loans made in Britain since 1797, has been for the use of Ireland; and several separate loans have also been made in Britain for Ireland. The interest and other charges on these loans is annually remitted from the treasury of Ireland to the British treasury.

Table IV. contains a state of the sums raised by these loans, and the capitals funded in the 3 per cents. 4 per cents and 5 per cents.; the total capital funded each year; the amount of the Irish debt payable in Britain at the end of each year; also, the interest, annuities, and charges of management, contracted by each loan.

<sup>\*</sup> See Note XVII. | See Note XVIII.

It appears that the whole sum raised in Britain for Ireland, and guaranteed, to 1st February 1813, is, - L.44,400,000

		_		
The capital funded in the 3 per cents.	-	L.	63,303,875	
in the 4 per cents.	-	-	5,054,375	
in the 5 per cents.	-	-	572,000	

Amount capital funded in Britain for Ireland, L.68,930,250

Interest of Irish debt funded in Britain,	- L.2,129,891
Annuities which terminate in 1860,	- 104,083
Charges of management,	24,132

L.2,258,106

Besides this, L.4,500,000, part of the loan raised in Britain in 1811, was for the use of Ireland; for which there was funded L.5,400,000, in the 3 per cents.; L.900,000 in the 4 per cents.; and a long annuity granted of L.15,562; but the interest of this being paid by Britain, it is not stated in the account of the Irish debt.

But this is only part of the Irish funded debt. Another part has been funded in Ireland, the interest of which is payable, and the capital redeemable there.

The first operations in that kingdom were by tontine annuities. In the years 1773, 1775, and 1777, L.740,000 was raised in that manner, and annuities granted to the extent of L.48.900.

The method generally followed of late is that of granting a funded capital in the 3½ per cents. equal to the sum borrowed, and an additional funded capital in the 5 per cents. such as the lender would accept. Sometimes a *Douceur* in Irish treasury bills has been also granted.

The progress of the whole Irish funded debt is exhibited in Table V.

	j	checa	,	ii sanua	ry 1813, were,
Sums raised in I	Duitain Con	Inole	and si	alm din a	Irish Currency.*
L.1,900,000 i					
British curren		neeu,	11.409	300,000	
			•	•	L.50,158,333
Sums raised in In	retailu,	•	,		23,413,517
Total raised,					L.73,571,850
Capital funded in	Britain,	the in	tèrest	payable	2
in London an	d guarant	eed,	L.68,	930,250	
and a further	sum, the i	nteres	st		
of which is als	o payable	in Lor	1-		
don, but not g	uarantee	d,	- 1,	900,000	)
			-		
			L.70,	830,25	0
equal in Irish	currenc	y to	-		L.76,732,772
Capital funded in	Ireland,	and th	e inter	est pay	
able in Dublin	1.				
31/2	er cents.	-	L.12,	680,979	2
4 pe	er cents.	-		227,600	)
5 pe	er cents.	-	13,	195,648	3
					26,104,220
Total Irish funde	ed debt pa	vable	in Lor	don an	d
Dublin, -		٠.		•	L.102,836,992
Interest on a	bove.		n		L.3,523,019
				al	- 179,782
Annuities,					
Annuities,					L.3,702,801

<sup>\*</sup> L.12 of British currency at par, is equal to L.13 Irish: but in the actual rate of exchange, the difference is often greater.

By the articles of Union between Britain and Ireland, which took effect 1st January 1801, the debts of each country, existing at that time, and their interest, are to continue as separate charges on the revenues of the respective countries; and such future expenses as are for the special service of either country, are to be charged on the revenue of the same: but the general charges for the army, navy, &c. being alike for the defence or advantage of each country, are appointed to be charged in the proportion of 15-17ths to Britain, and 2-17ths to Ireland.

When the Union between England and Scotland was accomplished in 1707, as Scotland was subjected, by the articles, to the payment of certain duties of customs and excise, then payable in England, and applicable to the debt of England contracted before the Union, it was agreed that the sum of L.398,085 should be granted by the Parliament of England as an equivalent for the same; and this sum was applied to the payment of the small public debt then due by Scotland, the indemnification of the losses sustained by the Darien Company, the improvement of fisheries and manufactures in Scotland, and some other public purposes.

# IMPERIAL LOANS.

Two loans have been raised in Britain for the emperor of Germany, and guaranteed by the British government. The interest, if not provided by the emperor, (and he has never made any provision) to be paid from the consolidated fund. The money for these loans was advanced by the subscribers to the British loans, in proportion to their subscriptions. The particulars are,

Loan of 1795, contracted at a capital of L.83 6s. 8d. in a fund at 3 per cents. for each L.100 advanced, and an annuity of L.5 for 25 years.

Loan of 1797, at a capital of L.226 10s. in a 3 per cent. fund, for each L.100 advanced.

Year.	Sum raised.	Funded at 3 per cent.	Interest.	Annuity.	Manage- ment.	Total. charge.
1795 1797	4,600,000 1,620,000	3,833,333 3,669,300	115,000 110,079	230,000	4,312 1,651	349,312 111,730
	6,220.000 F	7,502,633 Reduction in			5,963 1,458	461,042 1,458
					4,505	459,584

### LOAN TO PORTUGAL.

A loan of L.600,000 for the service of Portugal, was raised and guaranteed by Britain in 1809, and connected with the loan of that year, in the manner explained in Note XV.

The sum funded in the 3 per cent. reduced, was, L.895,522

Interest,	-		-			L.26,865
Management,		- 1			-	304
Annual charge, (besides si	nkin	o fu	nd c	f L.	30,000.)	L.27,170

# MANAGEMENT OF THE NATIONAL DEBT.

The management of the national debt is conducted by the Bank of England, except a small part which is in the hands of the South Sea Company. The expense of management, in most articles, previous to 1786, was at the rate of L.562 10s. per million of capital, whether of a three, four, or five per cent. annuity, reckoning L.40,000 of terminable annuities, equal to a million of capital.

In 1786, the rate of management was reduced to L.450 per million; and this was confirmed by an act of parliament in 1791.

In 1808, the rate of management was further reduced, and settled on the following terms:

L.450 per million, if the capital exceeded 300 millions, but fell below 400 millions.

L.340 per million, if the capital exceed 400 millions, but fell below 600 millions.

L.300 per million, on such part of the public debt as exceeded 600 millions.

No agreement was made for the case of the public debt falling below 300 millions.

Besides these allowances for management, the bank receives considerable sums for conducting loans and lotteries. The sum at present allowed for receiving contributions to the loans, is L.800 per million, and for transacting the business of the lotteries, at the rate of L.1000 for each contract of 20,000 tickets.

### SECTION II.

Plans adopted for the Reduction of the Funded Debt, and their Operation.

# 6. 1. SIR ROBERT WALPOLE'S SINKING FUND.\*

THE first plan for the discharge of the national debt, formed on a regular system, and conducted for some time with a considerable degree of firmness, was that of the Sinking Fund, established in 1716. The author of this plan was the earl of Stanhope; but as it was adopted under the administration of sir Robert Walpole, it is commonly denominated from him. The taxes which had been laid on before, for limited periods, being rendered perpetual, and distributed among the South Sea, Aggregate, and General Funds, as has been mentioned already, and the produce of these funds being greater than the charges upon them, the surplusses were united under the name of the Sinking Fund, being appropriated for the discharge of the national debt. The legal interest had been reduced from six to five per cent. about two years before, and as that reduction was conformable to the commercial state of the country, government was now able to obtain the same reduction on the interest of the public debt, and apply the savings in aid of the sinking fund. In 1727, a further reduction of the interest of the public debt from five to four per cent. was obtained, by which nearly L.400,000 was added to the sinking fund. And in the year 1749, the interest of part of the debt was again reduced to three and a half per cent. for seven years, and to three per cent. thereafter: and in 1750, the interest of the remainder was reduced to three and a half per cent. for five years, and

<sup>\*</sup> This account of sir Robert Walpole's sinking fund, is chiefly taken from Dr. Price's writings.

to three per cent. thereafter, by which a further saving of near L.600,000 was added to the sinking fund.

The opinion, strongly urged since by Dr. Price, seems to have been entertained at that time, of the importance of applying the produce of the sinking fund invariably to the discharge of the national debt, and borrowing by new loans when the public exigencies required it. Accordingly, the following sums were borrowed towards the supplies, from 1718 to 1731, being a period of peace.

L.505,995	_	-	In 1718,
312,737	-	-	1719,
500,000		_	1720,
1,000,000		-	1721,
500,000		-	1725,
370,000	-		1726,
1,750,000	-	-	1727,
1,230,000	-	-	1728,
L.6,168,732			
550,000	-	-	1729,
1,200,000	income.		1730,
500,000	-		1733,
L.8.418.732			

The sums applied from the sinking fund to the discharge of the national debt, from 1716 to 1728, amounted to L.6,648,000, being a very little more than the additional debt contracted in that time.

In 1728, the sinking fund was charged with the interest of the loan, and this was also done in the loans of the following years, and the additional taxes imposed for the payment of the interest of the loans, were applied directly to that fund.

Soon after, the plan of preserving the sinking fund inviolate, and borrowing by new loans, was abandoned.

In 1733, L.500,000 was taken from the sinking fund towards the supplies of the year. In 1734, L.1,200,00 was taken from it for the same purpose; and in 1735, it was anticipated and mortgaged. Since that time, the operations of the sinking fund, in time of peace, have been feeble, its produce being often diverted to other purposes: and at that time, the nation had no other free revenue, except the annual land and malt taxes, which were inadequate to the expense of a peace establishment on the most moderate scale. It was therefore necessary, if no additional taxes were imposed, to have recourse to the sinking fund, or to the inefficient system of discharging old debts and contracting new ones. In the peace which followed the treaty of Utrecht, being a period of 26 years, the longest which the nation ever enjoyed, the amount of debt discharged was only L.7.231.508. In time of war, the produce of the sinking fund was applied to the service of the year, and loans only made for the additional sums wanted.

in 1717, v	vas	-	9-1	-	L.323,439
Medium aı	ınual pro	duce fr	om 1717	to 1726	
both inc	lusive,	-		-	577,614
1727	to 1736,	-		-	1,132,251
1737	to 1746,		-		1,062,170
1747	to 1756,				1,356,578
1757	to 1766,			-	2,059,406

It seems unnecessary to trace the operations of this sinking fund further. It was continued nominally in the accounts of the exchequer, until the establishment of Mr. Pitt's sinking fund in 1786; but did little in time of peace, and nothing in time of war, to the discharge of the national debt. Dr. Price says, that at the time he

wrote, in 1772, it had afforded about 20 millions towards the payment of the national debt, in 56 years, being nearly L.357,000, annually, at an average. If, from this sum of 20 millions, we subtract the debt contracted from 1718 to 1738, the remainder is nearly equal to the debts discharged in the periods of peace which followed the treaties of Utrecht and Aix-la-Chapelle.

# § 2. MR. PITT'S SINKING FUNDS.

#### 1786.

THE present sinking fund was established under Mr. Pitt's administration, in 1786. The various branches of revenue then existing were united under the name of the consolidated fund.\* One million taken from that fund, was vested annually in the hands of commissioners for the redemption of the national debt, to be applied for purchasing capital in such stocks as they should judge expedient, at the market prices. To this fund was to be added, the interest of the debt redeemed, and annuities fallen in by the failure of lives, or the expiry of the terms for which they were granted, and life annuities unclaimed for three years were considered as expired, and added to the sinking fund. When this fund amounted to four millions, it was enacted that the interest of the redeemed debt, and annuities fallen in, were no longer to be applied to it, but remain at the disposal of parliament.

### 1792.

Another sinking fund was established this year, of one per cent. on the nominal capital of each loan, to which

\* See Note XIX.

the dividends on the capital redeemed by this fund were to be added. When annuities for a longer term than forty-five years, or for lives, were granted, the value which would remain after forty-five years, was appointed to be estimated, and one per cent. on that value set aside for their redemption. This fund was appointed to be kept separate, and applied for the redemption of the debts contracted subsequent to its institution, by which means it was estimated that every loan would be redeemed in forty-five years\* at furthest from its contraction.

In the same year, L.400,000 was granted in aid of the former sinking fund, and L.200,000 was granted by annual acts for the same purpose, till 1802, when the grant was rendered perpetual. Savings by reduction of the rate of interest of the national debt, were appointed to be added to that sinking fund; but no savings of this kind have taken place since its commencement.

## 1798.

This year, the application of one per cent. on the capital of the loans to the sinking fund, was deviated from. A part of the loan, (16 millions capital,) was charged on a tax then imposed, called the aid and contribution tax; for which the income tax was substituted the following year. In like manner, a part, or the whole of the loans for several years, was charged on the income tax, and no sinking fund of one per cent. provided for their redemption. The amount of capital for which no sinking fund of one per cent. was provided, is L.86,796,375. This system was abandoned in 1802, when all the loans were united, and the interest of these loans charged on the consolidated fund.

The two sinking funds were united, applicable to the discharge of debts existing in 1802; and the system of a sinking fund of one per cent. on loans subsequent to 1802, was revived, and has been followed in all the loans since, except that of 1807, when lord Henry Petty's system was adopted. The limitation of the sinking fund to four millions, enacted at its commencement, and a similar limitation in 1792, were repealed; and the application of annuities whose term was expired, and of savings by the reduction of the rate of interest, to the sinking fund, was repealed.

Table VI. contains a state of the loans from 1793, distinguishing those that were charged and those that were not charged with the sinking fund of one per cent. and the present amount of that fund.

# § 3. LORD HENRY PETTY'S PLAN OF FINANCE.

A NEW plan of finance was proposed to parliament in 1807, by lord Henry Petty, (now marquis of Lansdown,) chancellor of the Exchequer, and adopted in the arrangement of the loan for that year.

The annual expenditure during war, was estimated at L.32,000,000 beyond what the surplus of the consolidated fund, and the annual taxes, could supply. The war taxes were estimated at 21 millions, viz. property tax, L.11,500,000, and other articles L.9,500,000. The annual deficiency to be supplied by loan was therefore 11 millions, which were proposed to be raised by mortgaging the war taxes to the extent of ten per cent. on the sum borrowed; the surplus of which sum mortgaged, after paying for interest and management, was to form a sinking fund for redeeming the debt, and thereby disengaging the part of the war taxes mortgaged, in a

certain number of years, according to the rate of interest at which the loan was transacted. Thus, if the interest and management was five per cent. there would remain five per cent, as a sinking fund, and this would pay off the debt in fourteen years. The sums proposed to be borrowed in this manner were 12 millions for the first three years, 14 millions for the fourth, and 16 millions for each of the succeeding ten years, amounting altogether to 210 millions, for which, at the rate of ten per cent. the whole of the war taxes would be mortgaged: but the debt contracted the first year being now paid off by the sinking fund appropriated to it, the portion of the war taxes mortgaged for it would be set free, and be applicable to the loan of the following year; and another portion being set free the following and each succeeding year, these loans might be continued on this system without limitation of time.

But as the sums mortgaged for these loans were withdrawn from the war taxes, it was necessary to replace the same; and this was proposed to be done by raising supplementary loans, the annual amount of which would be equal to the sum mortgaged, deducting the excess of the war tax loan for the year, above the sum of L.11,000,000 wanted.

Thus, the first year, the sum borrowed is,

Inus, the first year, the sum borrowed is	,
	L.12,000,000
Of which required,	- 11,000,00
Excess,	L.1,000,000
Portion of war taxes mortgaged, Deduct above excess,	L.1,200,000 1,000,000
Sum to be raised by supplementary loan,	L.200,000

The second year an equal portion of the war taxes was proposed to be mortgaged, amounting, together with the former, to - - L.2,400,000

Deduct excess of loan as before, - 1,000,000

Deduct excess of loan as before, - 1,000,000

Sum to be raised by supplementary loan, second year, - - L.1,400,000

In this manner, the supplementary loan of the fourteenth year, would amount to 16 millions, and the amount of these loans for fourteen years, to L.94,200,000. In the fifteenth year, it would amount to 20 millions, which sum it would never exceed, and never fall below 16 millions. In twenty years, the amount of these loans would be L.204,200,000; and in each period of fourteen years after the first, the amount of supplementary loans would be 238 millions.

A sinking fund of one per cent, on the nominal capital, supposed funded in the three per cents, at 60, and therefore equal to 1-60th of the sum borrowed, was, agreeably to the system of 1792, to be added to the interest of these supplementary loans: and this charge to be provided for by imposing new taxes. It was proposed to diminish the amount of these taxes, or to supersede them altogether, by taking aid from the falling in of annuities, and from the surplus of the present sinking fund, after the amount of the same should exceed the interest of the debt remaining unredeemed. The surplus was expected to become available in the year 1817.

If a larger sum than 11 millions was required for the service of any year, it was to be raised by other arrangements.

As the ministry who planned this system did not continue long in office, it was never followed out after the first year. Its merits will be considered afterwards.

# § 4. MR. VANSITTART'S PLAN OF FINANCE.

The plan of finance proposed this year (1813) by Mr. Vansittart, and now adopted by parliament, is a modification of Mr. Pitt's sinking funds; and, among other objects, is intended to rescind the alterations, which have been made in these funds, as originally established in 1786 and 1792, by subsequent acts of parliament, and restore them, as far as practicable, to the state in which they would have stood if no such alterations had taken place. It will be proper, therefore, to recapitulate the original enactments and alterations, in order to render the new system more clearly intelligible.

The original sinking fund of 1786, consisting of an annual grant of L.1,000,000 from the consolidated fund, (increased in 1792 to L.1,200,000) together with the interest of the debt redeemed, and annuities for lives or years which might expire, but limited not to exceed four millions, was appropriated for the redemption of the debt then existing, of L.238,231,248; and therefore when a sum of redeemed debt, to that amount, should be vested in the hands of the commissioners, that debt was to be considered as discharged.

In 1792, when the war with France commenced, and new loans became necessary, a sinking fund of one per cent. was created on the nominal sum of each loan, which, it was estimated, would redeem it within 45 years at furthest from its contraction. In the succeeding years this system was so far deviated from, that loans to the amount of L.86,796,375 were contracted, without any sinking fund being provided for their discharge.

Had the original system of 1786 and 1792 been adhered to, so soon as the debt of 1786 was redeemed, the nation would have been eased of taxes to the amount of the interest of that debt, and of the sum appropriated to the first sinking fund; or these sums, or any part of them, might have been reserved for the charge of such loans as the exigencies of the times should require.

Also, after 45 years, or perhaps a shorter period, from the contraction of each loan, the nation would have been eased of taxes to the amount of the interest and sinking fund of that loan, or these sums reserved to bear the charge of future loans, as above-mentioned.

In 1802, the two sinking funds were united and appropriated to the discharge of the debt existing at that time, amounting to L.567,008,978, or, deducting the part then redeemed, to L.499,753,063, besides annuities for lives or years. The limitation of the sinking fund to four millions was repealed; and loans contracted in future were to be accompanied with a sinking fund of one per cent.; each sinking fund of this kind being applied agreeably to the enactment of 1792, to the separate discharge of the loan to which it was attached, until that loan was completely discharged; and then to terminate, or be released for future exigencies.

The effects produced by these alterations in the sinking funds were,

1st. The prospect of any relief from existing burdens, or the release of any funds at present appropriated, for future exigencies, was protracted by the union of the sinking funds to a more distant period. By the original plan, such relief would have taken place when the debt of 1786, amount L.238,231,248, was redeemed, which was expected about 1813. By the union of the sinking funds, no relief could be obtained till the debt of 1802, amount L.499,753,063, should be relieved, which was not expected till 1830.

2d. By repealing the limitation of the sinking fund to four millions, the united amount has been increased far beyond what was originally intended. 3d. The amount of taxes for supplying this enlarged sinking fund has been much increased, at the same time that no relief is obtained from the repeal of the taxes appropriated to the redeemed debt, until the whole debt existing in 1802 shall be redeemed.

The design of Mr. Vansittart's plan is to counteract these effects; to provide at present that relief which the public would have obtained from the original plan; to restrain the excessive increase of the sinking fund; and, at the same time, to afford equal security to the public creditors as they were entitled to by the act of 1792, by securing the redemption of each loan in some way, within a period not exceeding 45 years at furthest from its contraction.

For these purposes it is proposed, 1st, That whereas a sum equal to the debt of 1786, and bearing an interest nearly equal to the interest of that debt, is now vested in the hands of the commissioners; that so soon as the interest of the debt redeemed shall become fully equal to that of the debt of 1786, that debt shall be declared discharged, and the sums hitherto appropriated for the interest and sinking fund of the same shall be appropriated, so soon as required, to bear the charge of future loans; and therefore no new taxes shall be imposed for the interest or sinking fund of the new loans, till the same amount to a sum equal to the interest of that considered as released. By this means the loans of 1813, 1814, 1815, 1816, and part of that of 1817, will be defrayed without any additional taxes.

2d. Whereas loans to the extent of L.86,796,375 were charged on the consolidated fund in 1802, without any sinking fund attached to them, in consideration that the advantages above-mentioned, given to the general sinking fund by the enactments of that year, enabled it to bear that burden; it is proposed, now that these enact-

ments be partially repealed by the new system, in order to place the public creditors in a situation equally favourable to what they held by the establishment of 1792, that the one per cent. sinking fund on the above-mentioned sum, amounting to L.867,963, should be replaced to it.

3d. That as the amount of exchequer bills in circulation, and not redeemed within the year, has much increased, and at present is about L.26,000,000, that a sinking fund of one per cent. on that sum, or L.260,000, shall be provided; and that taxes to the amount of L.1,127,963 shall be imposed this present year, to meet that sum, together with the sum mentioned in the last article; and that, in like manner, a sinking fund of one per cent. shall be annually provided for any addition to the amount of exchequer bills in circulation, for the discharge of which, within the year, no funds are provided.

4th. That, in future, instead of allocating the sinking fund of one per cent. for the discharge of each separate loan, the whole funds of this kind shall be united, and applied to the discharge of the first contracted loan; and so soon as a sum equal to that loan shall be redeemed, the charge on the same shall be considered as released for the public service; and in like manner each successive loan shall be redeemed, and its charge released, in the order of their contraction, by the united produce of the sinking funds appropriated for the redemption of all the loans contracted since 1792: but the whole sinking fund created by the act of 1786, or by any subsequent acts, shall be continued and applied, until the total redemption of all the debt now existing, or to be created during the present war.

5th. As, by this arrangement, the discharge of successive loans, instead of commencing from their contraction, is postponed till all prior loans be discharged;

in order more effectually to secure the payment of each loan within forty-five years, a sinking fund, for the excess of the loan above the sum applicable in the same year to the reduction of the public debt, shall be provided, equal to one half of the interest, and a sinking fund of one per cent. on the nominal capital of the remainder, agreeably to the act of 1792.\*

6th. That the amount of taxes imposed each year shall be determined as follows:—the time of the discharge of each loan, according to article 4th, being estimated, and the charge on the loan for the year, according to article 5th: then, if no loan falls in within the year, new taxes shall be imposed equal to the interest and sinking fund of the loan contracted; but, if one or more loans falls in, the interest on these loans, being released, shall be appropriated to the charge of the new one, and taxes imposed for the surplus only; and if the interest on the loans released exceed the charge on the loans contracted, no taxes shall be imposed that year; and the surplus of interest released shall be reserved in aid of the charge of the loan of the subsequent year.

# § 5. REDEMPTION OF THE NATIONAL DEBT BY THE PURCHASE OF THE LAND TAX.

Taxes in various forms have been frequently but not permanently imposed on land in England, from a very remote time. The present land tax commenced in 1692, when a valuation of the land was made, and although considerably below the real value at the time, it afforded a revenue of about L.500,000, at one shilling per pound, including a like tax upon personal property, estimated at a very low rate. The valuation made at that time

has never been altered; and the tax has been imposed annually till 1798, sometimes at one shilling, sometimes at two shillings, sometimes at three shillings, most frequently at four shillings, which rate it has never exceeded. This tax was long considered as a heavy burden, and much resisted by the landed interest. Of late years it has been less regarded, partly from the increasing influence of the mercantile interest, and partly from its becoming, in consequence of the increase of the rent of land, the deterioration of the value of money, and the general magnitude of our taxes, comparatively an inferior object.

In 1798, the land tax was rendered perpetual at four shillings per pound, and the proprietors were empowered to purchase the sums charged on their estates for capital in the three per cents. affording an equal dividend. If they did not accept this offer within a limited time, it might be sold to others for capital affording a dividend of one fifth more than the tax purchased. The term for purchase has been since repeatedly extended. and various regulations enacted. In consequence of these enactments, the purchases of land tax amounted the first year to L.13,059,586 in the 3 per cents., and the second year to L.3,034,216, but afterwards the purchases went on languidly; and after fourteen years the amount of capital transferred for this purpose, on the 1st February 1813, was L.24,378,804, and the land tax redeemed, L.731,364, being somewhat more than onethird of the whole. In order to encourage the completion of this scheme, an act was passed last session, in which terms more advantageous to the purchaser were offered.\*

This plan is, in effect, no other than a transfer of

<sup>\*</sup> See Note XXII.

part of the capital of the funded debt from the former stockholders to the landed proprietors. These last pay a value for the capital with which they redeem their land tax, and their relief from that tax is equivalent to their receiving a dividend to the same extent. The landholders may still be considered as subjected to the land tax at its highest rate; though some of them pay it by drawing a dividend for capital in the funds, which they have purchased for value, and have thereby become stockholders to that extent. The public revenue may still be considered as drawing the whole of the land tax. and paying the whole of dividends. Could the portions of other taxes payable by particular classes of men be ascertained, it might as well be proposed to them to purchase an exemption from these taxes. Such of them as were able might embrace the offer, and after they had paid the value and received their exemption, they would be exactly in the same circumstances as if they had purchased capital in the funds, drawn their dividends, and applied them in payment of taxes. The public, in like manner, would lose in taxes what they saved in dividends. We cannot, therefore, consider the part of the national debt redeemed by the purchase of the land tax as affording any relief to the public burdens.

It has always been considered as necessary, upon the principles of the British constitution, that part of the taxes should be granted annually by parliament as a restraint on the power of the crown. The land and malt taxes, producing about L.2,700,000 annually, were formerly reserved for this purpose. Since the land tax was rendered perpetual, certain duties on sugar and tobacco, and on offices, pensions, and salaries, have been granted annually, together with the malt tax. The average nett annual amount of these taxes for three years preceding 5th January 1813, was L.4,806,726.

# § 6. OPERATION OF THE SINKING FUNDS.

The amount of money applied for the redemption of the national funded debt, and of capital and interest redeemed since the commencement of the sinking fund in 1786, to 1st February 1813, and the produce of the sinking fund at that time, are as follows:

Summer | Capital | Intercept

September 1991	pended.	redeemed.	redeemed.
3 per cents 4 per cents 5 per cents	126,822,903 6,586,934 126,998		311,856
Converted for life annuiti	133,536,836 es, -	210,461,356 1,961,582	, , , , , ,
Transferred for purchase	6,453,491		
Permanent annual grant tr Additional permanent and Amount of 1 per cent. sinl Sinking fund of 1807, on lannuities, the term of wh Life annuities, of which prior to 5th July 1802,* Life annuities unclaimed 5th January 1813,	1,000,000 200,000 4,738,683 626,255 79,880 21,141 30,135		
Deduct life annuities grant of which expired, -	13,149,587 135,673		
Amount sinking fund, 1st	February 18	13, -	13,013,914

The 3 per cents, were redeemed nearly at  $62\frac{7}{8}$  at an average.

The 4 per cents. at 841.

The 5 per cents. at  $89\frac{3}{8}$ .

The funded debt, 1st February 1813, was	L.812,013,135
Redeemed by sinking fund,	210,461,356
	L.601,551,779
Converted for Life annuities,	1,961,582
	L.599,590,197
Transferred for purchase of land tax, -	24,378,804
Unredeemed debt of Britain, 1st February 1813	3, L.575,211,898
Which debt was invested in the following	funds.
Bank annuities,	L.11,686,800
Loan of 1726,	- 1,000,000
South sea annuities, including loan of 1751,	16,125,684
3 per cent. consolidated,	312,894,703
3 per cent reduced,	78,760,033
	L.420,467,222
4 per cent. consolidated,	61,060,921
5 per cent. consolidated, - L.92,060,2 Loyalty Loan, 1,622,994	54
1,022,334	93,683,249
	L.575,211,393

Table III. contains the amount of the capital funded debt each year,\* the amount redeemed each year, and the balance, or difference, between the capital funded and the capital redeemed; also the whole funded debt existing each year, without regard to redemption; the whole debt redeemed, and the whole debt unredeemed. But this gives an imperfect view of the progress of the public debt; for the loan of the year is perhaps made in

the five per cents. and the redemption in the three per cents.; and therefore, if the capitals only be exhibited, the debt redeemed will appear more in proportion to the debt contracted than it really is. Therefore, other columns are inserted, exhibiting the value of the capital funded, the capital redeemed, and the balance, reduced to 3 per cents.; the reduction of the capital being made in proportion to the rate of interest, when the loan is wholly or partially funded at a higher rate than 3 per cent.

If the whole of the present funded debts were reduced to three per cents, the amount would stand as follows:

5 per cents. - - L.420,467,222 Value of L.61,060,921—4 per cents. 81,414,561 of L.93,683,249—5 per cents. 156,138,478

L.658,020,531

And if this be reduced to 5 per cents. or the sum for which it might be redeemed when the 3 per cents. are at 60, it comes, exclusive of the capital transferred for land tax, to L.394,812,318.

### § 7. IRISH, IMPERIAL, AND PORTUGUESE SINKING FUNDS.

A SINKING fund for the redemption of the IRISH DEBT payable in Britain, was established in 1797, similar to the British one per cent. sinking fund of 1792.

The amount of this sinking fund, 1st February 1813, was.

1 per cent. on L.68,930,250, being the amount of the Irish debt payable in Britain, L.689,802 Sinking fund on long annuities, - 8,829

> L.698,131 Carried forward, 14

	Brought for	rward,	L.698,131
Dividend on L.10,6	53,499, red	eemed at 3	per
cent	•		319,605
Amount of sinking	fund for Iris	sh debt pa	ya-
ble in Britain 1st	February 1	813,	L.1,017,736
Capital Irish debt I	payable in B	ritain, 1st	t
February 1813,	T- I		L.68,930,250
Of which redeemed,			10,653,499
Unredeemed debt	, -		L.58,276,751
Besides L.104,083 a		-	
3 per cent. cons.	-	-	L.28,086,904
3 per cent. reduc	ed		24,563,472
4 per cent. cons.			- 5,054,375
5 per cent. cons.	-		572,000
			L.58,276,751
Which reduced to 3	per cents, a	mounts to	L.60,342,875
And	to 5 per ce	nts.	36,205,725

The sum paid for redeeming the above capital of L.10,653,499, was L.6,695,894, being about  $62\frac{7}{8}$  per cent. at an average.

Table IV. contains, besides the particulars formerly mentioned, the Irish debt payable in London redeemed each year, the total redeemed, and the balances remaining unredeemed each year.

There is also a sinking fund, established at the same time, for the redemption of the Irish debt payable in Ireland, which consists of a permanent grant of L.67,635; of a charge of one per cent. on loans payable in Ireland; of dividends on stock redeemed; and of annuities fallen in. The sum appropriated annually to the Irish sinking fund is L.100,000 Irish currency, of which L.32,365 is appropriated for the reduction of the debt borrowed in Britain for Ireland in 1797; and the remainder, L.67,635, together with the expired annuities, is appropriated to the reduction of the remainder of the Irish debt existing before 1797.

The amount of capital debt payable in Ireland, redeemed on the 5th January 1812,\* was,

				irish currency.
In 3½ per cents.		-		L.2,796,829
In 5 per cents.	•		-	1,815,357
				L.4,612,186
Which was redeemed for		-		L.3,709,105
And the sinking fund for to 5th January 1812, was, Part of annual grant as al		_	ayabl	e in Ireland,
Expired annuities,	JUVE,		-	
	P	•		- 54,043
1 per cent. on loans,	-		-	203,962
				L.325,640
Interest on debt redeemed	,	-	-	188,657
				L.514,297

A sinking fund of one per cent. was charged on the IMPERIAL LOAN of 1797, being L.36,693 annually. There

<sup>\*</sup> The account of the debt redeemed in Ireland in 1812 has not been received.

was no	sinking fo	und for	the loan	of	1795.	Now	the
amount	of the two	imperia	d loans w	vas	L	.7,502,	633
And the capital redeemed by the above sink-							

ing fund, 1st February 1813, 1,361,974

Imperial debt remaining 1st February 1813, L.6,140,659

The above debt was redeemed for L.824,328 being about 603 per cent. at an average.

The present imperial sinking fund consists of the above-mentioned charge of one per cent. Dividend on L.1,361,974, redeemed at 3 per cent. 40,859

L.77,552

The LOAN for PORTUGAL in 1809, was charged with an annual payment of L.30,000, in addition to the interest and charges of management, for its redemption, The capital funded for that loan in the 3 per cent, re-

duced, was L.895,522 Of which redeemed, 1st. Feb. 1813, 176,674

And remaining unredeemed, L.718,848

The above debt was redeemed for L.112,367

being about 63% per cent.

The present sinking fund is, Annual appropriation, L.30,000 Dividend on L.176,674, redeemed at 3 per cent.

L.35,300

5,300

### RECAPITULATION.

By collecting the particulars above detailed, the state of the funded debt due or guaranteed by Britain, on the 1st February, 1813, appeared as follows:

	3 per cents.	4percents.	5 per cents	Total.
Amount funded. British debt, Of which converted into life annuities,	649,330,565 1,961,582		93,825,249	812,013,135 1,961,582
Irish debt, Imperial debt, - Portuguese debt,	647,368,983 63,303,87 <i>5</i> 7,502,633 895, <i>5</i> 22		572,000	810,051,553
	719,071,013	73,911,696	94,397,249	887,379,958
Of which redeemed by sinking funds. British, - Irish, - Imperial, - Portuguese, -	202,522,956 10,653,499 1,361,974 176,674		142,000	210,461,356 10,653,499 1,361,974 176,674
	214,715,103	7,796,400	142,000	222,653,503
Remaining unredeemed by sinking funds. British, Irish, Imperial, Portuguese,	444,846,027 52,650,376 6,140,659 718,848	5,054,375	93,683,249 572,000	599,590,197 58,276,751 6,140,659 718,848
Fransferred for land tax	504,355,910 24,378,804	66,115,296	94,255,249	664,726,455 24,378,804
	479,977,106	66,115,296	94,255,249	640,347,651
				Reduced to 5 per cents.
British, (deducting cap tax,) Irish, Imperial, Portuguese, -	ital transfern	ed for land	658,020,531 60,342,876 6,140,659 718,848	3,684,395

And the charge for interest, annuities and management, is as follows:

	Interest.	Annuities	Manage- ment.	Total.
On British debt, - Deduct from interest and ma		1,206,174		28,426,318
nagement, and add to annu ties, for stock converted,		+135,673	667	+ 76,159
On Irish debt, On Imperial debt, On Portuguese debt, -	26,866,625 2,129,891 225,079 26,865	104,083 230,000	24,132	
	29,248,460	1,675,930	322,946	31,247,336
Of which redeemed by sinking funds.  British,	6,394,644 319,605 40,859 5,300		71,556 3,622 463 60	41,322
	6,760,408		75,701	6,836,109
Remaining unredeemed by sinking funds. British, Irish, Imperial, Portuguese,	20,471,981 1,810,286 184,220 21,565	104,083 230,000	20,510 4,042 244	
Transferred for land tax, -	22,488,052 731,364	1,073,930	8,295	
	21,756,688	1,675,930	238,950	23,671,568

Such is the extent of the funded debt, due, or guaranteed by Britain, and the annual charge attending the same. It cannot now be doubted that the Imperial and Portuguese debt are as much a charge upon Britain as any part of its proper debt; and suspicions may be entertained that the Irish debt payable in Britain, or perhaps the whole Irish debt, will terminate in the same manner. In regard to this, it is premature at present to form a decided opinion.

#### SECTION III.

# Unfunded Debt.

THERE is always a large sum, besides the funded debt, due by the British government. This may arise from any national expense for which no provision has been made, or the provision has proved insufficient, or not forthcoming at the time wanted. The forms of the unfunded debt are various; but the following are the principal branches.

I. EXCHEQUER BILLS. These are issued from the exchequer, in consequence of acts of parliament, several of which are passed every session. The first were issued in 1696, to the amount of L.2,700,000, and being intended as a temporary substitute for money during the recoinage at that period, some of them were then so low as L.10, and L.5. There are none issued now under L.100, and many of them are for L.500, L.1000, and still larger sums. Most of them bear interest, generally at the rate of from 3d. to 34d. per day for L.100; and being distributed among those who are willing to advance their value, they form a kind of circulating me-After a certain time, they are received in payment of taxes, or other monies due to government; and the interest due on them at the time is allowed in the payment. They cease to bear interest so long as they are in the hands of the revenue collectors, or other public officers; but the interest re-commences when they are issued again to the public. The Bank of England often engages to receive them to a certain extent, and thereby promotes their circulation; and the daily transactions between the bank and the exchequer are chiefly

carried on by bills of L.1000, deposited in the exchequer by the bank, to the amount of the sums received by them on account of government.

These bills are sometimes granted on the credit of the supplies for the present year; and in this way the produce of the annual taxes is generally anticipated. Sometimes they are charged on the supplies of the following year, and a large sum is generally authorised to be raised on them in time of war, to answer exigencies, by an act, proceeding upon what is called a vote of credit, passed near the conclusion of each session of parliament. New exchequer bills are frequently issued in discharge of former ones; and they are often converted into funded debt, by granting capital in some of the stocks, on certain terms, to such holders as are willing to accept them.—The operations of this kind since 1791, have been already detailed.

II. NAVY BILLS. These are issued from the navy office, to answer any purpose in that important branch of national expenditure; and they bear interest after a certain date, if not discharged. A practice had long prevailed, when the number of seamen for the service of the year was voted, to grant a sum estimated at the rate of L.4 per month for each man, allowing 13 months to the year, for the whole naval expense; wages, victualling, wear of shipping, and ordnance, included. In consequence of the deterioration of the value of money, this allowance became insufficient; and navy bills, to a large amount, were issued to supply the deficiency; and these were often funded afterwards in the same manner as exchequer bills. Since 1797, this practice has been discontinued; and sums, considered as adequate in the present circumstances, voted at once for the service of the navy; since which, the amount of the navy bills has

not been so great as formerly; and they have been paid from the money granted for the navy, without recurring to the system of funding. The are now made out at 90 days date, and bear interest at 34d. per day for L.100, and are negotiated as bills of exchange.

III. ORDNANCE BILLS, or DEBENTURES, are issued in like manner from the ordnance office, for supplying the exigencies in that branch of expenditure.

Victualling and transport bills are issued from the respective offices in the same manner. There is also always a large amount of floating debt at the navy, victualling, transport, and ordnauce offices, for which no bills have been issued.

Table VII exhibits the amount of exchequer bills, navy bills, and ordnance bills, and other debts at these offices, and the whole amount of unfunded debt, in these three branches, on the 5th January of each year, from 1793 to 1813; also the increase or decrease during the preceding year. The fluctuation of the unfunded debt explains in part the cause of the great inequality of the addition to the funded debt, and must be taken into consideration along with the increase of the funded debt, after reducing both to the same rate of interest, in order to form a judgment of the whole increase of the public debt in any year.\*

A new kind of debt has originated in the financial arrangements of the present year. The holders of exchequer bills proposed to be funded, and who were willing to contribute a further sum, payable by instalments, to the extent of one half of the bills funded, on the terms proposed, received assignable debentures bearing interest at 5 per cent. and payable half yearly at the same

terms as the three per cent. reduced stock; the holders of which are entitled to demand payment in money, on the 5th April 1815, or the 5th April of any succeeding year, upon three months previous notice; or, in place of money, to receive for each L.100 in said debentures, L.100 in the 5 per cent. cons., L.120 in the 4 per cent. cons., or L.150 in the 3 per cent. reduced, in option of the holder. The sum raised in this manner was L.800,000.\*

Besides the three principal branches of the unfunded debt, there are always a number of demands on the public, for bills accepted by the treasury; army charges, and miscellaneous services of various kinds. These are daily fluctuating, and their amount at any particular time cannot be easily ascertained.

The amount of these debts on the 5th January 1813, and the two preceding years, together with the whole amount of the unfunded debt as reported to parliament these years, and the annual increase, are subjoined to the Table.

The amount of the three great branches, 5th January 1813, was - - - L.54,055,632

Miscellaneous articles, - - 3,783,064

Amount reported to parliament, - L.57,838,696
Increase of unfunded debt in 1812, - L.3,800,637
To these sums a large addition may be made, for demands due by the public, not brought to account.

The outstanding taxes, due to the public, may be placed against the unfunded debt. The only article of this sort deserving notice, is the property tax, on which there is a large arrear. It has amounted for some years past to about eight millions; but measures are now adopted for its readier collection.

<sup>\*</sup> Resolution, House of Commons, proposed 8th July 1713. II.

The imprest monies, or sums in the hands of the treasurers of the army and navy, and other public accountants, and which, so far as not expended, are refunded to the public at clearance, may also be stated against the unfunded debt. The amount of these cannot be ascertained.

The unfunded debt of Ireland unprovided for, on the 5th January 1813, consisted of

Exchequer bills at 5 per cent. - L.2,508,940
Sum due to Britain on account. - 2,820,409
L.5,329,349

### POSTSCRIPT.

Additions to the funded debt, Session 1812-13.

O. Exchequer bills funded, amount	•	•		L.12,000,000
Sum funded at L.115. 10s. in 5 per	cent.	cons		L.13,860,000
Interest at 5 per cent Management, supposed at L.300,		•		L.693,000 - 4,158
Total charge,		•	•	L.697,158
P. Exchequer bills funded, amount				L.3,755,700
Sum funded at L.139 in 4 per cents		-		L.5,220,423
Interest at 4 per cent				L.208,816
Management at L.300,				- 1,566
Total charge,				L.210,382

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Q. Joint loan for Britain and Ireland, funded at L.110 in the 3 per cent. reduced; L.60 in the 3 per cent. cons.; and a long annuity of 8s. 6d. for 46 \(\frac{3}{4}\) years.

	Britain.	Ireland.	Total.
Sums raised,	21,000,000	6,000,000	27,000,000
Sums funded in 3 per cent. reduced and in 3 per cent. cons.	23,100,000 12,600,000	6,600,000 3,600,000	29,700,000 16,200,000
Total funded,	35,700,000	10,200,000	45,900,000
Interest, Long annuities,	1,071,000 89,250	306,000 25,500	
Management at L.300,	1,160,250 12,878	331,500	1,491,750
4	1,173,128		

The amount money raised for Britain, in Session 1812—13, insluding exchequer bills funded, is - - - L.36,755,700

The capital funded in 5 per cents. - - - L.13,860,000
in 4 per cents. - - - 5,220,423
in 3 per cents. - - - 35,700,000

	in a per	cents.		•	33,700,000
Amount funded,			1. //-		L 54,780,423
Interest, - Long annuities,	,			4	L.1,972,816 89,250
37				.	- 18,602

Total charge, exclusive of sinking fund,

L.2,080,668

## PART III.

EXAMINATION OF PLANS FOR THE REDEMPTION OF THE NATIONAL DEBT, AND OTHER FINANCIAL OPERATIONS.

### SECTION I.

Examination of Dr. Price's Views of Finance.

DR. PRICE's views of the national debt were first announced in his Treatise on Reversionary Annuities, in the year 1771; and more fully unfolded in an appeal to the public on that subject, published the following year; and in some subsequent publications.

His plan for the redemption of the national debt, is the application of a certain sum of money annually, set apart from the rest of our annual revenue, and appropriated for the purchase of stock at the current prices; the interest of the part of the debt thus redeemed being always added to the original sum, to increase the operation of the fund. This system to be inviolably followed, in time of war as well as in time of peace; and money, when wanted, to be raised by new loans, as if no such fund existed. To secure the steady execution of this plan, the management of the fund to be committed to special commissioners; acting under penalties in such a manner as would take it out of the hands of the treasury, and form a check upon the House of Commons itself.

The efficacy of this plan depends upon the operation of compound interest, which he considers as omnipotent. Money, he says, bearing compound interest, increases at first slowly; but the rate being continually accelerated, it becomes in time so rapid as to mock all the powers of imagination.

He proceeds to illustrate and enforce his plan in the following manner.

There are three ways in which a nation may apply a sinking fund:

1st, The interests disengaged by it from time to time may be applied in payment of the public debt.

2d, They may be applied to current services.

3d, They may be immediately annihilated by abolishing the taxes charged with them.

In the first way of employing a sinking fund, it always increases, and that with a force which is continually accelerated; and which, therefore, however small at first, becomes at length equal to any effect. In the second way, it admits of no increase; because it always acts with the same force. In the first way it resembles a grain of corn sown, and the produce sown again, and so on; which will soon afford an increase sufficient to support a kingdom. In the second way, it resembles a seed the produce of which is consumed. What has been said of the second way, is true in a higher degree of the third. A fund of the first sort is money bearing compound interest; a fund of the second sort is money bearing simple interest; and a fund of the third sort is money bearing no interest at all.

In illustration of this, the Doctor, supposes an annual sum of L.200,000, set aside as a fund for keeping the debt, which the nation is continually incurring, in a state of redemption. If applied the first way, a debt of

L.200,000 is discharged the first year, which, supposing interest at five per cent., disengages an annuity of L.10.000. If this annuity, instead of being spent on services, is added to the fund, and both employed in paying debts, an annuity of L.10,500 will be disengaged the second year, or L.20,500 in both years. Computing in this manner, the amount of annuities disengaged increases faster each succeeding year, and in 86 years. becomes L.13.083.000, which being added to the original sinking fund, amounts to L.13,283,000. The full value, therefore, of an annuity of L.13,083,000, will have been paid off in eighty-six years, that is, nearly 262 millions of debt, and consequently, though the state had beeen adding three millions to its debt every year. or 258 millions altogether, it would have been more than discharged, and that at no greater expense than the annual saving of L.200,000.

In the second way, the sum of anuuities disengaged by it would have been eighty-six times L.10,000, or L.860,000, and the discharged debt would have been L.17,200,000; but besides this, there would be a debt saved, in consequence of applying every year the disengaged annuities to current services; for which, otherwise, equivalent sums must have been borrowed. L.10,000 will be saved at the beginning of the second year; L.20,000 at the beginning of the third year; and L.850,000 at the beginning of the eighty-sixth year; and altogether, L.36,550,000, which, added to the L.17,200,000 of debt discharged, makes the advantage to the public from this plan in eighty-six years, L.53,750,000; and as it was 262 millions by the first one, the difference to the public in its favour, is L.208,250,000.

In the third way, the whole advantage derived from

it, is the discharge of a debt of L.200,000 annually, or L.17,200,000 in all.

Such is the substance of Dr. Price's views. He goes on to illustrate them by other suppositions, which, as his method of arguing is the same, it is unnecessary to recapitulate. His work is written in a very intemperate style, and contains, among others, the following assertions:

1st, That no benefit is derived from applying a fund in the second of the above-mentioned ways, rather than the first. In both cases, the taxes are continued during the operation of the fund, and the national burdens are the same. The difference in favour of the former, already stated, is gained without any kind of loss or expense. By following the latter, we subject the nation to a loss of 208 millions, from a circumstance absolutely frivolous.

2d, War would increase the efficacy of the sinking fund; and any suspension of it then would be the madness of giving it a mortal blow, at the very time it was making the quickest progress.

sd, A state may, without difficulty, redeem its debts by borrowing money at an equal, or even a higher interest than the funds bear, and without providing any other funds than such small ones as are necessary to pay the interest of the sums borrowed. In private life, such a measure would be justly deemed absurd. But, in a state, it would be the effect of the soundest policy. It is borrowing money at simple interest, in order to improve it at compound interest.

4th, The sinking fund proposed would render it of little or no consequence what interest a nation paid for its loans. Reduction of interest has not been attended with the advantages commonly imagined, and, as hitherto managed, has only been an expedient to postpone public bankruptcy, by lessening the possibility of avoiding it.

The arguments already adduced in support of our twelfth general proposition, are perhaps sufficient to point out the judgment which ought to be formed of this plan, and of these assertions: for several reasons, however, they demand a more particular discussion.

1st, The excellent character and high reputation of the author. A pious divine,—a respectable scholar, an expert calculator,—a virtuous man,—and an upright patriot.\*

2d, The effects which his plan has produced upon our system of national finance. It has not shared the common fate of the projects of private individuals, and vanished in neglect and oblivion. It is the basis of Mr. Pitt's sinking fund, adopted fifteen years after its first publication, and now followed out for twenty-seven years; and although with some deviations, yet on the whole, with a steadiness seldom experienced in public measures for so great a length of time, and under a succession of different administrations.

It will be proper, before proceeding, to state distinctly the points in which all agree, and the points at issue.

It is universally admitted, that every productive additional taxation tends to prevent the progress of the national debt, if it be in a state of accumulation; and to accelerate its discharge, if it be in a state of redemption.

That every increase of expenditure, whether arising from necessity or profusion, tends to increase its accumulation, or retard its discharge.

That any sum of money, however small, improved by compound interest, will amount, in length of time, to an indefinite magnitude; and therefore,

 We respect highly the integrity of the man, and believe that in all his writings, he was actuated by the purest motives for the public welfare; but we do not mean to insinuate any opinion in regard to his principles of civil liberty. That any surplus of national revenue above national expenditure, will be sufficient, if it continue for a long time, and be faithfully applied, to discharge any national debt, however great.

The doctrine maintained by Dr. Price is, that the formation and inviolable appropriation of a sinking fund, operating by compound interest, in war as well as in peace, is a measure of the utmost consequence, and that the effects of this system are greatly superior to those of any other application of a surplus, the expenditure and taxation being equal. That this is his opinion, appears from the passages above quoted, and many others to the same purpose. His work means this, or it means nothing: for it was never called in question that saving of expenditure, or increase of taxation, have a powerful effect on the state of national finance.

In opposition to Dr. Price's doctrine, it is maintained. that the separation of a sinking fund from the general revenue, is a measure of no efficacy whatever ;-that the first and second methods of applying a surplus abovementioned, are merely different modes of official arrangement, leading to the same result ;-that in time of war, when the expenditure exceeds the revenue, the preservation of the sinking fund, and consequent increase of loans, is a system from which no advantage can arise; if it could be conducted without expense, it would be nugatory; as it is necessarily attended with expense, it is pernicious ;-that at the conclusion of a war, any surplus revenue, applied for the discharge of debt during the subsequent peace, operates by compound interest, during the continuance of peace: but the notion of uniting that period to another period of peace, or to a still longer period of alternate war and peace, in order to obtain the powerful effect of compound interest acting for a great length of time, is illusory.

We return to the case supposed by Dr. Price, above mentioned, and compare the effects of the first and second methods of applying the surplus, either in time of peace or war.

In time of peace, when the second method is followed, L.10,000, being the interest of the debt discharged the first year, is applied to the current services of the second year; L.20,000, the third year; and these sums are supposed requisite to complete what the service of each vear requires : and, as Dr. Price observes, they must have been borrowed, if the first method had been followed. If loans be made for this purpose, either taxes must be imposed for the payment of the interest, or the sums borrowed accumulate by compound interest. former case, the nation is subjected to the burden of taxes for payment of the interest of L.10.000 the first year; of L.20,000 more, or L.30,000 altogether, the second year; and of L.36,550,000 the eighty-sixth year; none of which would have been imposed according to the second method. It is this gradually increasing, and ultimately large additional taxation, that occasions the difference of L.208,250,000 stated by Dr. Price, as the loss arising from the second method. If the same taxes be imposed when the second method is followed, their produce is not wanted for the services of the year, and must accumulate at the end of the period to the abovementioned sum in favour of the public.

If taxes be not imposed to pay the interest of these loans, then to the L.20,000 borrowed the second year, there must must be added a sum sufficient to pay the interest of the loan of the former year; and, in like manner, a sum must be borrowed each succeeding year, equal to the interest of all the former loans, by which means the amount of these loans would accumulate by compound interest against the public.

The disengaged annuities under the second method, may be dissipated by profusion, and then there will be a difference between the methods equal to what Dr. Price states; but it is the profusion, and not the mode of application, that is the cause of that difference. They may be applied to the construction of canals, harbours, and other objects of national utility; and the benefits accruing from these to the public, may repay the expense of their execution, or otherwise; but the propriety of this mode of application of surplus revenue, does not belong to our present inquiry.

In war, let us adopt Dr. Price's supposition of three millions being required annually in addition to the sums raised within the year, and of continuing the application of L.200,000 as a sinking fund; which sum is comprehended in the loan of three millions. The debt contracted in three years, is nine millions; and the additional taxes for payment of interest at five per cent. come to L.450,000. The national debt redeemed by a sinking fund of L.200,000, operating by compound interest in three years, is L.630,500, and therefore the additional unredeemed debt is L.8,569,500.

If no sinking fund be continued during the war, a loan of L.2,800,000 only will be required the first year, the interest of which is L.140,000. But the taxes imposed that year amount to L.150,000, (for we suppose the extent of taxation in both methods equal,) therefore there is a surplus of L.10,000 applicable to the service of the second year. The loan required for the second year will therefore be L.2,790,000; the two loans together, L.5,590,000; and the interest upon them L.279,500. The additional taxes imposed the two first years amount to L.300,000, leaving a surplus of L.20,500 applicable to the service of the third year. The loan required the third, is therefore L.2,779,500, and the amount of the three loans

L.8,369,500, exactly the same as the unredeemed debt when a sinking fund is continued; and it is obvious the same equality will hold for any number of years.

When Dr. Price says that a debt of 258 millions might be discharged in eighty-six years, at no greater expense than an annual saving of L.200,000, he overlooks the taxes imposed year after year, for the payment of interest; a great part of which would not have been needed, if that annual sum had not been separated from the public revenue. The reasoning used above is equally applicable to any other supposition of war expenditure, whatever be the annual deficiency, whether uniform or varying,—whether continued for three, or thirty, or a hundred years, still the taxation and expenditure of each year being the same, the finances of the nation will be found in the same condition at the end of the period, whether the sinking fund be preserved inviolate, or entirely laid aside.

If no sinking fund be kept up for thirty years, a little alteration of the arrangement of public accounts would bring them exactly to the same state as if it had been uniformly adhered to; and conversely, the present form of our financial accounts arising from a sinking fund, may be brought by a like alteration of arrangement, to the form in which they would have stood, if no sinking fund had ever been thought of. It is impossible that a mere change of order in the public accounts, capable of being reversed at any time, can be attended with advantage to the public.

At the termination of a war, the nation remains charged with a certain debt, and it possesses, or ought to possess, a certain surplus revenue. The efficacy of this surplus to discharge the debt, depends upon its proportion to the debt, and the length of time during which it is applied to that purpose, and upon these alone. It

operates by compound interest: but the manner in which the debt was contracted, or the surplus obtained, have no relation to the progress and period of its discharge. It is of no avail that a sinking fund had been operating by compound interest during a former peace. When war breaks out again, the operation of compound interest is at an end. In place of continuing to discharge debt, an additional debt is contracted. When peace returns, the operation of discharge re-commences from a new basis, according to the state of finance at the time. The public debt is certainly increased;—the proportion of surplus revenue to that debt, and therefore the time requisite for its complete discharge, may be greater or less than at the former peace; but the two periods of peace cannot be united to obtain a powerful effect from the long continuance of compound interest.

The doctor's plan for discharging the national debt by borrowing money at simple interest, in order to improve it at compound interest, is, we apprehend, completely delusive. He admits the absurdity of such a measure in private life,—and its absurdity in national finance is exactly the same. The cases differ only in extent of sum, and duration of time, which nowise alter the general tendency of the measure. Suppose a million borrowed for this purpose, and assigned to commissioners for the redemption of the national debt, in whose hands it operates by compound interest. The interest of this loan is L.50,000, which must either be provided for by some additional tax, or saved by some measure of public economy; or if neither of these be adopted, an additional loan must be made next year to pay the interest. In the former case, it is the tax or the economy, and not the operation described, that benefits the revenue; and they would have produced the same effect by affording an additional surplus improved

at compound interest, without any loan. In the latter case, an additional sum of L.50,000 is borrowed the second year; and a sum equal to the interest of both loans, or L.102,500, the third year; and thus the debt accumulates by compound interest against the public exactly to the same extent that the money vested in the hands of the commissioners accumulates in its favour.

Dr. Price's assertion, that it is of little consequence what interest a nation pays for its loans, is untenable. In time of war, additional interest must be met by additional taxes, or accumulate by compound interest against the public. In time of peace, reduction of interest produces or increases a surplus, upon the application of which the redemption of national debt entirely depends.

The doctor remarks, that a debt bearing a high rate of interest, with a sinking fund attached, is redeemed in less time than the same debt with the same sinking fund at a low rate of interest; and he considers this circumstance as a recompense for the burden of the high interest. He overlooks that as a much larger sum is annually raised from the public when the interest is high, a great part of this additional burden being paid to the national creditors, is entirely lost to the public; and a part only being added to the sinking fund as the redemption of the debt advances, accelerates the course of its discharge. A debt of ten millions, bearing interest at six per cent, is redeemed by a sinking fund of L.100,000, in about 333 years. If the rate of interest be only 3 per cent. it will require 47 years: but in the former case, the annual burden on the public is L.700,000, and the whole burden L.23,450,000; and in the latter case, the annual burden is L.400,000, and the whole burden L.18,800,000. If the sum of L.700,000 had been raised annually while the debt bore interest at three per cent. it would have been discharged in 19 years for

L.13,300,000. Or if L.477,000 had been raised annually, it would have been discharged in S3½years, for 15,979,500.

Dr. Price supposes the case of a state burdened with debt, bearing five millions of interest, and able, by its ntmost exertions, to raise a million more as a sinking fund. "This, if the debts bear interest at 6 per cent. will pay off three-fifths of them in twenty-three years, and the state may be saved; but if the interest be no more than 3 per cent. it will not give the same relief in less than double that time, and a public bankruptcy may prove unavoidable."\* He does not mention that. in the former case, the debt supposed to exist, and to be discharged, is L83,333,333, and in the latter case, L.166,666,666. The same national exigencies must have required the contraction of an equal debt. What he proves is only that a debt of half the amount, but bearing interest at a double rate, will be discharged in less time by the same sinking fund.

Dr. Price, in comparing the different ways of applying the disengaged annuities, says, that if they be not applied the first way, they might, for aught he knows, be best employed in the last way, that is, in the abolition of taxes; for a kingdom will then be sure of receiving some relief. We have endeavoured to evince that the first and second methods are the same in substance, and differ only in form. We esteem them greatly superior to the third. It is by continuing the taxes, and thus supporting the surplus during a period of peace, that any thing effectual can be done for discharging the national debt.

Dr. Price communicated to Mr. Pitt, in 1786, three plans for the redemption of the national debt.†

<sup>\*</sup> Observations on Reversionary Annuities, 4th edit. vol. i. p. 189.

<sup>†</sup> Morgan's Review of Dr. Price's writings on the Finances of Great Britain.

One of these, No. III. is the application of a million surplus, exactly the same as was adopted in the sinking fund established that year, which will be examined in the following section.

Another, No. II. proposed that the sinking fund should be raised from a million to L.1,600,000, by additional taxes imposed at the following periods.

First year,	-		-		-		-		L.60,000
Second year,		-		-		-		-	180,000
Third year,	-		-		-		-		120,000
Fourth year,		-		-		-		-	120,000
Fifth year,	-		-		-		**		120,000

L.600,000

This plan is more efficacious than the former, as the sum appropriated is greater; but of the same general tendency.

In the other plan, No. I. it is proposed to impose the same additional taxes, but apply their produce as follows:—A part of the three per cent. stocks to be converted into four per cents., and the additional interest to be paid by these taxes. The holders of the three per cent. stock converted to advance an adequate sum for the increase of interest, and this sum to be applied in addition to the million for the redemption of the national debt.

We entirely agree with Dr. Price in the disadvantage of borrowing at a low rate of interest, with an increase of nominal capital; and the last mentioned plan, so far as it tends to counteract that system, appears beneficial.

The doctor, in a subsequent publication,\* presu-

<sup>\*</sup> Preface to the third edition of Observations on Reversionary Annuities, p. 14, &c. This article is omitted in the following edition.

ming that the sinking fund would strenghten the public credit, and raise the three per cents. considerably above par in intervals of peace, lays down a plan, founded upon that supposition, for reducing the national debt. Instead of a reduction of interest, which, he says, would retard the extinction of the public debt, he proposes a reduction of capital; and, supposing the three per cents. at 110, he assumes, that the public creditors would agree to have their capital reduced from L.100 to L.80, if secured of the present interest for fifteen years. At the end of that period, the reduced capital, bearing interest at 3\frac{3}{4} per cent. would sell much above par, and a similar operation might be repeated upon terms still more advantageous, and by this scheme, the operation of compound interest itself would be aided.

Admitting the price of stocks, and consent of the creditors, as supposed, this appears to us one of the best parts of the doctor's plans. The methods he proposes to improve the surplus value of the stock for the public emolument, is, perhaps, the most effective that could be taken.

The advantages expected by Dr. Price and his friend, Mr. Morgan, from the execution of his plans, depend in a considerable degree upon the confidence which they suppose these measures would give in government security, and the rise of the price of stocks which that confidence would produce. All this is so hypothetical as to render a more minute examination of these plans, so far as they rest upon that expectation, unnecessary.

Much has been said by Dr. Price and others, of the advantage which a sinking fund produces in supporting the price of stock. We apprehend it is incapable of producing any such effect. The price of stock, like that of any commodity, depends on the proportion of

supply and demand. Whatever sums are brought into the money market, and applied by the commissioners for the purchase of stock; equal sums are withdrawn from the money market, by the additional loans required to replace what is invested in the hands of the commissioners. Dr. Price justly observes,\* that whatever effect borrowing every year has in sinking the funds, paying every year would have an equal contrary effect. He has not attended to the obvious consequence. that, if the payment be made by means of borrowing, it can produce no alteration in the price of the funds at all. He supposes ten millions borrowed every year to defray the expenses of war, nine millions only of which would have been wanted had not the surplus million been locked up; and further, that this scheme, by keeping up public credit, and throwing money every year into the hands of the lenders, enables government to borrow at four instead of five per cent. and thereby save L.50.000 of interest. He overlooks that the effect of throwing a million in the hands of the lenders, is compensated by demanding from them an additional million in the loan.

The purchases made by the commissioners, no doubt, support the funds at a higher rate than they would stand, if there were no such purchasers in the field, and the loan for the year the same; and this advance takes place at a time when a high price is disadvantageous to the public: but the additional loan which the sinking fund requires, must have as great an effect in depressing the funds, and that depression takes place at a time when a low price is disadvantageous to the public.

<sup>\*</sup> Preface to third edition of Observations on Reversionary Annuities.

#### SECTION II.

## Examination of Mr. Pitt's Sinking Funds.

The system of finance recommended by Dr. Price, is the same as that carried into excution under the administration of Mr. Pitt, and continued since. In the former section, we considered its merit and tendency on general principles. In this, we are to consider the effects it has actually produced.

The result of the foregoing reasoning is, that a sinking fund connected with an increasing debt, provided the loans be obtained on the same terms the debts were redeemed, and the additional operations conducted without expense, is attended with no consequence, good or evil: but in every loan, the contractors have profit at the expense of the public; and when the system of a sinking fund is followed, the public, besides expense, sustains a loss equal to the bonus attending the additional loans,

It is of importance to ascertain whether the nation has sustained a loss of this kind, and to what extent. If the fact be ascertained, it corroborates the forcgoing reasoning; if it be considerable, it leads us to inquire for what reason the system is persevered in.

The whole sum raised by loans from 1793, (when the first loan was made after the establishment of the sinking fund) to 1st February 1813, after deducting the part of the loyalty loan repaid, is - L.392,358,532

And by funding exchequer and navy bills, 62,258,173

L.384,616,705

And there was expended in that period, by the commissioners for the redemption of British debt, L.133,536,836.

During the whole of that period, the national debt annually increased; the sums borrowed by loans, or otherwise, exceeding the debt redeemed. Now, if no system for redeeming the national debt had been adopted, the amount of taxes and expenses remaining the same, the requisite money raised by loans or funded bills would have been less by the last mentioned sum made over to, and expended by, the commissioners.

The sum raised by	loans or	funded	bills, as above,
was,	-	-	L.384,616,705
And the capital funded	for these	e were,	-
In the 3 per cents.	-	- 1	L.461,719,310
In the 4 per cents.	-	-	36,107,321
In the 5 per cents.	-	-	75,955,255
			L.573,781,886

And long annuities have been granted, at a medium for 60 years, - - L.435,861

Now these may be reduced to 3 per cents. by allowing a capital in proportion to the rate of interest, which is the natural value, and, although there be some fluctuation in the market price, comes near enough to the actual value.

Sum funded in 3 per cents. - L.461,719,310 Value of L.36,107,321 in 4 per cents. 48,143,095 of L.75,955,255 in 5 per cents. 126,592,091

Value of L.435,861 annuities for 60 years, at 18.9 years purchase, L.823,773, in 5 per cents. and in 3 per cents. - 13,729,621

Whole value of funded capital and annuities, reduced to 3 per cents. L.650,184,117

fund,

126	INQUIRY CON	CERNING TI	IE
	apital redeemed by	the commiss	ioners R. N. D.
	33,536,836, was, ,956, 3 per cents.	radaamad far	126,822,904
	,400, 4 per cents.		
	,000, 5 per cents.		
	——		
L. 210,461	,356		L.133,536,836
And the ca	—— apital redeemed, r	educed to 3 p	per cent. is,
			L.202,522,956
L.7,796	,400—4 per cents.	-	10,395,200
142	,000-5 per cents		236,666
			L.213,154,822
Now a	s L.384,616,705	(the sum	raised) is to
L.650,184	,117, (the capital	required to b	e funded in the
3 per cents	. in order to raise t	hat sum) so is	L.133,536,836
	elivered to, and e		
	. D. and which		
	oans, if no such o		
	402, the sum which		
	capital, (3 per ce		
	tracted from 1793	s to 1812, re	
cents.		-	L.650,184,117
	ing fund had exist	ed, it would	T
have be	en less by -	•	L.225,740,402
And would	l have amounted	only to	L.424,443,715
From abo	ove sum of L.63	50,184,117	
	bt redeemed 2:	13,154,822	
Unrede	emed debt,	A pa	L.437,029,295
Loss to t	he public by the	sinking	

L.12,585,580

But the present excess of national debt occasioned by the sinking fund is much higher. A portion of this loss has occurred each year for a period of twenty years; and the whole effect ought to be estimated by accumulated computation of interest. If the last mentioned sum be equally divided, the annual loss is L.629,279, and this, in twenty years, at compound interest, amounts to above twenty millions. Something, however, may be deducted from this statement, because the loss was not equally diffused through the period; the portions appertaining to the early part being considerably smaller.

Neither has any thing been charged for the expense of the commission for the redemption of the public debt. This branch of public expense, indeed, has been very moderate; but its amount, with compound interest, ought to be added to the other loss, in order to ascertain the whole.

We are next to examine that part of Mr. Pitt's plan which attaches a sinking fund of one per cent. to the nominal capital of every loan, imposing taxes to that extent beyond what are required for the payment of the interest. This plan was also suggested by Dr. Price.\*

There is an inequality in the extent of this fund from its being applied to the nominal capital. If the loan be made in the 3 per cents, it amounts to 1-60th of the sum borrowed. If it be made in the 5 per cents, to 1-100th.

Like the other parts of the plan, it occasions a loss to the public by borrowing upon higher terms, in order to redeem a part of the debt upon lower ones. It is equally destitute of all real efficacy for the discharge of debt, under equal circumstances of taxation and expenditure.

The ultimate effects of adherence to this system, du-

<sup>\*</sup> Appeal to the Public, p. 40, 41.

ring a long period of continued warfare, remains to be ascertained. Suppose the annual deficiency to be supplied by loan is 11 millions: this funded in the 3 per cents. creates a capital of L.18,333,333, the interest of which is L.550,000, and the sinking fund, L.183,333.

It is obvious that if no more taxes be imposed than are required to pay the interest, the annual deficiency of 11 millions remains the same. A loan to that extent must be made annually, and taxes imposed for the payment of the interest, and our debt, interest, and taxes, increase annually, by equal sums, without the most distant prospect of relief.

But if taxes be imposed to a greater amount than the interest of the loan, the surplus fills up some part of the deficiency. On the foregoing supposition, L.183,333 is deducted from the 11 millions, leaving a deficiency of L.10,816,666; and if an equal amount of taxes be imposed the second and each succeeding year, the part of the deficiency supplied will increase by compound interest; and in a course of years, the whole 11 millions will be supplied, and no further loans or additional taxes will be needed, provided the expenditure remain the same as at the beginning of the period.

Now, as an annuity of L.1, at five per cent. compound interest, amounts to L.60 in about twenty-nine years, that length of time is required before the deficiency of 11 millions be supplied. During that time, L.733,333 of additional taxes are imposed annually, or L.21,266,666 altogether. The result is, that if the nation, which cannot at present raise 11 millions more to equalize its taxes to its expenditure, shall increase them gradually for twenty-nine years, till the addition amount to 21 millions, the point of equalization will be obtained; or, to use the language of the sinking fund, the debt

annually redeemed, will then become equal to the debt contracted.

If the loan of 11 millions be made in a five per centfund, the sinking fund is L.110,000, which, added to the interest, gives an annual charge of L.660,000. Upon this supposition, thirty-seven years are required before the deficiency is supplied; and the additional taxes imposed, amount to L.24,420,000.

A sinking fund of this kind is preferable in ultimate efficacy to one founded on the appropriation and accumulation of a fixed annual sum. It increases with the increase of the funded debt; and, in a long time, will be equal to the discharge of any debt, however great, provided the nation bear the taxes which it requires. An annual sum, esteemed large at first, is likely to become inadequate to the discharge of a debt which increases beyond expectation. A sinking fund of L.1,200,000 would require forty-seven years and a half to fill up a deficiency of 11 millions; and the additional taxes imposed, would amount to above 28 millions.

We have stated the case of continued warfare, as being more simple in calculation. In the case of alternate war and peace, the periods would be different, but the relative merits of the different systems the same.

But the chief point to be attended to is, that none of these plans, nor any possible plan, has any intrinsic power to discharge, or aid the discharge of our national burdens. An opinion prevails that the minister who instituted the sinking fund has put a powerful machine in action, which, although its first operations were feeble, has now become of great efficacy, and that the efficacy will continue to increase without any further exertion on our part, like the acceleration of falling bodies by the power of gravity, till it amount to an indefinite magnitude.

When a minister establishes a sinking fund connected with a system of borrowing, he acknowledges the inability of the nation to bear at present the expense which his system of administration requires; and his plan, whatever it be, does no more than inform the public, that if posterity be able and willing to raise such sums, by extended taxation, at certain periods which his plan points out, as will make up for our deficiencies, with interest, and furnish besides what is wanted for the exigencies and contests of their own time, the public debt which he contracts will then be discharged.

That minister would have reason to doubt whether posterity would submit to all this. Yet, the plan of our sinking funds established in 1786 and 1792, have been adhered to with great steadiness, and our taxes raised to an amount beyond precedent or expectation.

The sums annually raised by taxes, since the commencement of the war, are as follows:\*

Year ending 5th January.

1793 L	.17,656,418	1804	L.38,858,373
1794	17,170,400	1805	46,578,564
1795	17,308,811	1806	51,339,045
1796	17,858,454	1807	54,982,035
1797	18,737,760	1808	60,189,414
1798	20,654,650	1809	63,026,563
1799	30,202,915	1810	65,227,264
1800	35,229,968	1811	69,188,041
1801	33,896,464	1812	66,973,208
1802	35,415,096	1813	66,444,108
1803	37,240,213		

From this statement it appears that the amount of our taxes, which was nearly stationary for some years after the commencement of the war, has increased progressively, (with one or two slight exceptions) since the year

1795; that the increase was most rapid some years after the re-commencement of the war, when heavy war taxes were imposed, and that the present amount of taxes is about four times what it was at the commencement.

The whole amount of taxes, upon the average of the three last years, after deductions, is about 65 millions; a sum more than sufficient to defray the expense of the war, enormous as it is; but not sufficient to provide at the same time for the interest of debt formerly contracted.

Our present national revenue would therefore have been sufficient to support, without limitation of time, the expense of the present war on the scale it is conducted, if the taxation during former wars, and the early period of the present one, had been equal to the expenditure.

The cause of this is, not that certain sinking funds were established twenty or thirty years ago, but that we now submit to a taxation of 65 millions, and to the privations occasioned thereby. The same amount of taxation would have produced the same effect, although none of these funds had ever been established.

Convinced that the sinking fund has contributed nothing to the discharge of the public debt, and that it has occasioned a large addition to our public burdens, we next inquire, whether any and what advantages have been derived from it.

The means, and the only means, of restraining the progress of national debt, are, saving of expenditure, and increase of revenue. Neither of these have a necessary connection with a sinking fund: but if they have an eventual connection; and if the nation, impressed with a conviction of the importance of a system established by a popular minister, has, in order to adhere to it, adopted measures, either of frugality in expenditure, or exertion in raising taxes, which it would not

otherwise have done, the sinking fund ought not to be considered as inefficient; and its effects may be of great importance.

We are not of opinion that the sinking fund has contributed in any degree to frugality in expenditure. The time during which it has operated, has not been a time of national frugality. Ministers have had the full power of raising what loans they pleased, to supply the means of any expenditure, however lavish; and it will not be said they have used this power with a sparing hand.

In regard to increase of taxes, we are of opinion that the sinking fund has had a real effect in calling forth exertions, which, although they might have been made as well and as effectually, would not have been made, unless to follow out the line which that system required. A loan is made, and the revenue is considered as charged, not only with the interest, but a certain proportion of the principal, annually. Taxes are imposed to meet the one as well as the other. If the sinking fund had not been in view, it is likely taxes would have been imposed for the interest only.

If the sinking fund could be conducted without loss to the public, it would not be wise to propose an alteration of a system which has gained the confidence of the public, and which points out a rule of taxation that has the advantage at least of being steady. If that rule be laid aside, our measures of taxation might become entirely loose: but if the sinking fund be attended with a heavy loss, it seems proper to inquire whether a plan might be followed that would deliver us from this loss, and at the same time carry on the necessary measure of increased taxation. The present proportion of one per cent. on the nominal capital might be continued. If a loan of twenty millions be transacted in the 3 per cents, the sinking fund attached to it on the present system is L.333,533.

Now taxes may be imposed to that extent, besides what are required for interest; and that sum, instead of being made over to commissioners, may be deducted from the loan. Thus the nation would save the loss it at present sustains, of borrowing on lower, and paying on higher terms; and the imposition of L.333,333 additional taxes, which is the only measure of real efficacy, would be the same as before.\*

## SECTION III.

Examination of Lord Henry Petty's Plan of Finance.

WE have already given an account of lord Henry Petty's plan of finance. It was proposed to parliament and the public, in the year 1807, accompanied with an elaborate set of tables. Being very complex, it was not generally understood. As it promised to raise the necessary loans with little or no increase of taxes, it was favourably received, and probably would have been continued for some years, if the ministry who brought it forward had remained in office.

The scheme, as proposed, though sufficiently complex in itself, is blended with many circumstances extraneous to its general merit. Advantage is taken of the falling in of annuities at different periods, by the expiring of their term, and of the reduction of the rate of management, and of an expected surplus from the present sinking

fund. The savings by annuities and management, must give the same relief to the national annual burdens. under any system of finance; and if it be a beneficial measure to call in the aid of the surplus of the present sinking fund, when it attains a certain magnitude, the advantage resulting from it will be the same, with whatever other measures it be connected. The proper way to judge of the new scheme, is to lay these extraneous circumstances aside: to leave the old debt to combat with the sinking funds already provided for its redemption, aided by any other means which existing circumstances supply: and to consider the operation of the new scheme, in regard to the new debt, contracted during the time it is in force, compared with the effects of the continuance of the former system. This will render our view of the subject simpler; and if the new scheme will not bear the test of examination when applied in this manner, it will not bear it at all.

The first point which presents itself to our view, is, that the sums proposed to be raised by new taxes, during the first years of the scheme, are much less than the interest of the debts contracted; and therefore money must be borrowed, not only to supply the excess of the war expenditure above the sum raised within the year, but also to pay the interest of a great part of the loan, and thus subject the nation to the heavy and increasing expense of compound interest.

The sums borrowed the first year were,
On war taxes, - - - L.12,000,000
By supplementary loan, - - 200,000

L.12,200,000 Carried forward.

Alterior Marian	
Brought forward, But there was applied to the redemption of the war tax loan from the mortgaged	L.12,200,000
taxes,	600,000
Nett loan, deducting part redeemed, The sum required to complete the expen-	L.11,600,000
diture is	11,000,000
And the remainder applied to pay the interest of the war loan is	L.600,000
The only additional taxes imposed, are interest of the supplementary loan, and sinking fund on the same; and as the fo is appropriated, the latter only is to be a the interest of L.11,400,000, added to the exclusive of the supplementary loan, of a millions were applied to the public service. In the second year, the sums proposed to	L.3,333 for a rmer of these tated against funded debt, which only 11
On war taxes,	L.12,000,000
By supplementary loan,	1,400,000
	L.13,400,000
Of which applied to the redemption of war tax loans, by taxes mortgaged this and former year,	1,200,000
Nett loan, deducting part redeemed,	L.12,200,000
Sum required for expenditure,	11,000,000
Remainder applied to pay the interest of the war loans for two years,	L.1,200,000

Against	which the	ere is to l	be stated	,	
Sinking fo	and of su	pplement	ary loa	n of first	
year, w	ith interes	st,	-		L.3,500
Sinking fo	and of su	pplement	ary loa	n, second	1111
year,	4	1-1	-	-	23,333
Interest of	war tax l	loan rede	emed fir	st year,	30,000

L.56,833

Leaving an additional interest, for which no taxes are laid on, of L.1,143,667.

If we trace the proposed operations of this scheme further, we will find that the same pernicious mode of borrowing, for payment of the interest as well as the principal, continues for a course of years, though at a rate gradually diminishing, because the interest on the loans annually raised on the credit of the war taxes, for which no new provision is made, becomes less, owing to the redemption of part of that debt; and the interest on the supplementary loans, for which, together with a sinking fund, provision is made, increases, together with these loans themselves.

In order to show what the progress and effects of this system, if continued, would have been in a period of twenty years, unincumbered with extraneous matter, Table VIII is inserted in the Appendix, divided into several parts.

Part I, relates to the loans on the war taxes; Part II, relates to the supplementary loans; and Part III, exhibits a general view of the effects of both loans combined.

The debts contracted and redeemed, inserted in this table, are according to their real value. If invested in a three per cent. fund, as was proposed, the nominal sum

will be greater, (supposing the three per cents. at 60,) in the proportion of five to three.

By comparing the two last columns of Part III, it will appear how far the sums raised annually by taxes imposed since the commencement of the scheme, would fall short of the interest on additional debt contracted, for which taxes ought to have been provided. At the commencement, the difference is very great; and although they come near to an equality towards the end of the period, yet, taking in the whole, the difference is great. The necessary effect of this deficiency of taxation, is to subject the public to the loss incurred by compound interest.

Part IV is added to assist us in forming a judgment of the effects of this system compared with others. It exhibits the amount of debt existing, and taxes paid each year, for twenty years: first, upon the supposition of no sinking fund being established, and taxes imposed annually for the payment of the interest of the loans only; secondly, upon the supposition of a sinking fund of 1-100th of the sum borrowed; thirdly, of a sinking fund of 1-60th of the same. The first of these was the old system; and, though not a good one, may be taken as a standard of comparison, whereby to judge of the merit of the others; the second is, the present system, when the loan is made in a five per cent. fund at par; and the third, when it is made in a three per cent. fund.

It appears from this table, that, at the end of fourteen years, the period at which the whole war taxes are mortgaged, the amount of unredeemed debt, by lord Henry Petty's system, is L.202,784,803, and the amount of taxes paid during these fourteen years, is L.28,413,333. When no sinking fund is established, the amount of existing debt at the same period is L.154,000,000, and the taxes paid, L.57,750,000. The additional debt con-

tracted by the former, is L.48,784,863, and the saving in taxes, L.29,836,666. The excess of the additional debt above the saving in taxes, is L.19,448,137. At the end of twenty years, the amount of unredeemed debt, by lord Henry Petty's system, is L.285,519,205, and the amount of taxes paid during these twenty years, is L.92,893,333. The amount of debt on the old system is 220 millions, and of taxes, 115 millions. The additional debt contracted by the former, is L.65,519,205; and the saving in taxes, L.22,106,667; the excess of additional debt above the saving in taxes, L.43,412,538.

In the system where a sinking fund of 1-100th is established, the unredeemed debt at the end of fourteen years, is L.139,527,162; and the amount of taxes, L.69,300,000. The debt is less by L.14,472,838 than according to the old system; and to obtain this saving, there is paid in additional taxes, L.11,550,000. The debt saved exceeds the additional taxes by L.2,922,838. At the end of twenty years, the unredeemed debt is L.187,617,650; the taxes, L.138,600,000. The saving in debt is L.32,382,350; the additional taxes, L.23,600,000. The excess in the saving of debt above the additional taxes, L.8,782,350.

In the system where a sinking fund of 1-60th is established, the unredeemed debt at the end of fourteen years, is L.129,878,604, and the amount of taxes, 77,000,000. The debt is less by L.24,121,396, than according to the old system, and the additional taxes amount to L.19,250,000, and the debt saved exceeds the additional taxes by L.4,371,396. At the end of twenty years the unredeemed debt is L.166,029,417, and the amount of taxes, L.154,000,000. The saving in debt is L.53,970,583; the additional taxes L.39,000,000; and the debt saved exceeds the additional taxes by L.14,970,583.

Thus it appears that lord Henry Petty's system is by

far the worst, and in twenty years brings on an addition of funded debt, (five per cents.) besides what is applied to the public service, of L.65,519,205 By the old system, the debt contracted, is

equal to the sums applied to the public service.

By the systems of a sinking fund of 1-100th, the debt contracted is less than the sums applied to the public service,

By the system of a sinking fund of 1-60th, the debt contracted is less than the sums applied to the public service, by

32,382,350

53,970,583

The general result might have been known without calculation. In lord Henry Petty's system, taxes are only imposed for a part of the interest of the loan, and in the first years only for a small part; and the interest not provided for, must accumulate in the manner of compound interest, to augment the capital debt. In the system where a sinking fund of 1-100th is established, a part of the loan is annually paid, and its interest of course cancelled; and as taxes were imposed for the full interest, the part thus saved, operates in depressing the capital debt: and this effect takes place in a higher degree when a sinking fund of 1-60th is established.

In comparing the merit of different systems, the only points necessary to be attended to are, the amount of the loans contracted,—the part of these loans redeemed,—the interest incurred,—and the sums raised by taxes. The arrangement of the loans under different branches, and the appropriation of particular funds for payment of their respective interests, are matters of official regulation; and the state of the public finance is neither the better nor the worse whether they be conducted one way

or other. A complicated system may perplex and mislead, but it can never ameliorate.

It is frivolous to maintain that a part of the public debt is charged on the war taxes, and, being in a course of discharge, ought to be separated from the remainder, in forming an estimate of the whole. That part, as much as any other, is a burden on the nation. It must be discharged, if ever it be so, by taxes levied in future on the nation; and until it be paid, its interest must be provided for by such taxes; otherwise compound interest accumulates against the public. It is of no consequence whether these taxes be of the kind originally imposed under the name of war taxes, and afterwards rendered permanent, at least for a period, by such appropriation; or new taxes of a different kind, imposed when the war taxes are discontinued.\*

As well might a land steward, when required by his employer to lay before him a state of his rents and debts, reply, that it was unnecessary to bring the whole into view at once; that he had allocated a part of the rents of such a manor for the gradual discharge of a certain bonded debt, and those of another manor for the discharge of another bond; that, if the remaining rents, after these defalcations, were insufficient to support his lordship's expenses, he could easily borrow what money might be wanted; and if a growing deficiency should be the result of these operations, it might perhaps be made up at some future time, when the present leases on the estate expired, and the rents might rise.

We have heard it maintained, that a system may be so constructed, that, although it does harm in the first years of its operation, the result, after a long continuance, will be beneficial. From its effects after a few years, we may judge with certainty of its ultimate tendency. Suppose, after a trial of ten years, it has rendered the state of our national finance so many millions worse than it would have been under a different system, but after that period it takes a beneficial turn. Were this possible, it would be better to follow the measures of that other system for these ten years, and then commence, upon a better basis, the measures of the former: but the supposition of a change of tendency is absurd. If it do harm in the beginning, it will do more harm the longer it is persevered in.

We have stated the loss to the public by lord Henry Petty's system in twenty years, at L.65,519,205, or, deducting the saving in taxes, at L.43,412,538: but it may be justly estimated at a sum considerably higher. The above is the sum which the public must pay to the national creditors, or remain under the burden of, in addition to the sums raised by loan, and applied to the national service. It arises from the operation of compound interest against the public, and is incurred for the sake of postponing the payment of interest, which should commence when the debt is contracted, to a distant time: but besides this, another loss is incurred by the system of borrowing larger sums than are wanted, in order to maintain a sinking fund, the consequences of which were considered in the last section; and a further loss is incurred by borrowing in a three per cent. fund during war, when the price is low, to be repaid during peace when the price is high, the consequences of which will be further considered in a following section. These two sources of loss, indeed, attach to other systems, where similar measures are followed. as well as to lord Henry Petty's; but they take place in his system to a greater degree, because the measures from which they arise, are carried on to a greater extent.

The distinction of war tax loans and supplementary loans, is in itself entirely futile; but occasion is taken from it to ascertain the portions of debt for which the interest shall be levied in taxes, and the portions, for the interest of which no provision shall be made at present. The proportion of these, like the scheme from which they arise, is altogether arbitrary, and very irregular,—the taxes imposed in the early part of the system being much smaller than those imposed afterwards.

After a continuance of twenty years, the sum raised in taxes within the year, is L.13,613,333, being L.2,613,333 more than it would have been under the old system, though less by L.662,627 than it ought to be, in order to cover the interest of the debt. This, and an additional capital of L.65,519,205, is incurred, for the sake of saving L.22,106,677 in taxes during these twenty years, chiefly in the early part of them. In the 16th and following years, the taxes raised within each year are greater than those required by the old system.

## SECTION IV.

Examination of Mr. Vansittart's Plan of Finance.

I. This plan has been assailed as trenching on the sinking funds formerly established, and thereby diminishing the security of the public creditors, to whom the national faith is pledged on the terms of these funds. It does not seem liable to any just censure upon this

ground. It is justly observed, that "the separation kent up for the purposes of account between the original sinking fund of 1786, and the additions subsequently made to it, is only nominal; it neither has been nor can be attended to in practice, because the whole of the debt contracted since the establishment of the sinking fund having been borrowed upon the old stocks, and no distinction made between the old and new proprietors, the whole debt is now considered as one indiscriminate mass, to which the purchases made by the sinking fund are equally applicable. No right of priority of redemption can exist in any particular class of stockholders, nor any conditions of repayment be claimed (except in the instance of the 5 per cent. loan of 1797) beyond those laid down in the act of 1792, under the faith of which all subsequent loans may be considered as contracted. By that act, provision is made for the redemption, within forty-five years, of all the debts subsequently created; and within this limit, parliament has the power to regulate the mode of redemption at its discretion."\*

The advantages given to the public creditors by the regulations of Mr. Vansittart's plan, appear to place them in a situation equally favourable to that which they held under the enactments of 1792.

After all, the security of the public creditors is not so much affected by any regulations adopted in the management of our finance, as by the magnitude and increase of the national debt. If the amount of the loans be greater than what the capitalists can easily supply, the consequence is a depression of the funds; and this, at the same time that it occasions the loans to be contracted on unfavourable terms, induces a loss upon those stockholders who are obliged to sell. The

<sup>\*</sup> Outlines of a Plan of Finance, 1813, pages 6 and 7

largeness of our late loans, and the high amount of funded capital, are the real causes of the depression of the funds; and no security ever was or could be given to the public creditors, at the contraction of any loan, that could limit the contraction of such debts in future as the exigencies of the times might require; and if the amount of debt seem to approach to its utmost limit, while the public expense is still increasing, the dread of a national bankruptcy will depress the funds in a still higher degree.

A private creditor attends to the amount of the debts, and the comparative state of the income and expenses of his debtor. If he finds his debts increasing beyond the measure of his estate, his alarms will be excited, and they will not be much relieved by any detail of the arrangement of his affairs which the steward may communicate to him.

II. It is observed, that "nothing more can be expected in a permanent war system than to provide for such a scale of expense as must necessarily arise out of the war, without including that great increase which has been occasioned by our extraordinary exertions abroad in the four last years,—which must be considered as only of an occasional nature,—that the equalization of the public income and expenditure may be considered as a primary advantage of the sinking fund; and this object, so far as is requisite to meet that part of the expenses of the war, which may be considered as necessarily permanent, appears to have been already accomplished."\*

The doctrine here laid down cannot be admitted without considerable allowances. If the situation of a nation,

Outlines 1813, pages 4 and 5.

as connected with surrounding nations, and the system of conduct observed toward them, be such as to promise alternate periods of war and peace at no long intervals, the proportion of revenue and expenditure may be regulated with a view to such a prospect. When there is a probability of a long continued war, (and the outlines appear to be drawn with a view to that case) the public revenue must be raised to the average of war expenditure, in order to prevent the risk of our finances being overwhelmed. If, during the continuance of war, the expense of one year, or a few years, should, from special circumstances not likely to recur, much exceed the average war expenditure, it is consistent with safety, and proper, that the revenue should equal the average expenditure, and not the increased expenditure of these years. There is the same reason for this, as for regulating the revenue under a system of alternate peace and war, to the average expenditure of a period which comprehends both. So far the doctrine is admitted: but the application to existing circumstances should be made with caution. We ought to inquire what reason there is to believe, on the supposition of the continuance of the present war, that the expense of the following years will be less than that of the present and immediately preceding ones. Shall we have fewer enemies? Do we propose to carry on our operations, by sea or land, on a less extensive scale? Can we support our armies and navy, or defray any branch of public expenditure, at a lower, or even an equal sum, as we did some years ago? Have we fewer foreign possessions to defend? Shall we be less lavish in bestowing subsidies at every quarter? We have often flattered ourselves, during this war, that our expensive exertions would not be of long continuance, and these hopes have been uniformly disappointed. If

our present prospects be not more favourable, our measures should be regulated accordingly.

III. No observation is juster, or of more importance, than that already quoted from the outlines, of considering the whole public debt as one indiscriminate mass. We have had occasion to enlarge on this point in former parts of the present inquiry. By the system of frittering down the public debt in various portions, and allocating different funds for the discharge of each, and noticing the time when this and the other part would be discharged, the public has been misled, and even our financiers have not escaped embarrassment. In the outlines, however clearly the above principle is laid down in limine, it seems to be lost sight of in the detail. In the annexed tables, the time when each loan will be discharged, according to the different systems and suppositions, is calculated with special care, and seems to be considered as an important circumstance.

IV. The system now under consideration is attended with the same palatable feature which accompanied that of lord Henry Petty, of promising an exemption from additional taxes for the three next years, and a smaller amount of them in the succeeding years. The manner of obtaining the former of these points is by declaring the debt of 1786 cancelled, and allocating the sinking fund, provided for it, to bear the charge of the new loans. This is merely a point of official regulation. The measure itself is attended with no injury to the national creditors; but it is not clear that it is salutary to the public. Whenever a nation does not tax to the amount of its expenditure, an increase of debt, to a higher amount than the sum saved in taxes, is inevitable; and in the comparison of different systems, those

which impose the lightest taxes must always bring on an increase of debt in a still higher degree. This principle has been fully illustrated in former parts of this inquiry: we shall now state its application to the different suppositions considered in the outlines.

The first hypothesis, contained in Table A, is that of an annual loan of 28 millions, at 5 per cent. which is reduced in the then existing system to 27 millions, in the year 1821, but continues without diminution in the new system. To exhibit the comparative effect of these systems on this hypothesis, Table X, is inserted in our Appendix,\* from which it appears that the amount of additional taxes to be laid on from 1814 to 1821 inclusive, according to the existing system, is L.14,933,328 According to the new system,

The whole amount of additional the levied these eight years, by the	
ing system, is	L.67,199,976
by the new system, -	22,227,352
Excess of taxes by the existing syste	m, L.44,972,624
The debt created, by either system these eight years, is	L.224,000,000
The amount of the sinking fund, exis	ting
system,	L.152,912,380
new system,	99,278,439
Additional debt unredeemed,	
existing system,	L.71,087,620
new system.	124,721,561

The national debt (reduced to 5	per
cents.) is greater, after eight years	, in
the new system, by	L.53,633,941
Saving in taxes, new system, during t	that
period,	44,972,624
Excess of additional debt, above say	ing
in taxes,	L.8,661,317
The amount of additional taxes to be i	imposed in sixteen
years from 1814 to 1829 inclusive	, by the existing
system, is	L.29,333,328
by the new system, -	- 16,524,392
The whole amount of additional tax	ces
levied these sixteen years, by the e	2X-
isting system,	L.251,466,600
by the new system,	118,859,736
Excess of taxes by the existing system	n, L.132,606,864
Debt contracted in these sixteen year	rs,
existing system,	L.440,000,000
new system,	- 448,000,000
	<del></del>
Amount sinking fund,	
existing system,	L.403,586,488
new system,	- 226,114,350
Additional debt unredeemed,	
existing system,	L.36,413,512
new system,	- 221,885,650

The national debt (reduced to 5 per

cents.) is greater after sixteen years, in the system, by L.185,472,138
Saving in taxes, new system, during that period, 132,606,864
Excess of additional debt above saving in taxes, L.52,865,274
The hypothesis in Table B, is that of an annual loan of 25 millions, at 5 per cent. reduced, in the existing system in 1821, to 24 millions. According to this hypothesis, there is more additional debt contracted and unredeemed by the new system, in the first eight years, to the amount of L.51,543,153  The saving taxes is 43,626,792
Excess of additional debt above saving in taxes, L.7,916,361
The unredeemed national debt (reduced to 5 per cents.) will be greater in the new system, after sixteen years, by L.184,692,891 Saving in taxes, 130,208,242
Excess of additional debt above saving in taxes, L.54,484,649

The hypothesis in Table C, is that of an annual loan of 12 millions, at 3 per cent. reduced, in the existing system in 1826, to 11 millions. According to this hypothesis, the national debt, on the new system, is greater after sixteen years, by - - L.53,566,359

Saving in taxes, - - 46,992,592

Excess of	addition	al de	bt ab	ove s	aving	
in taxes,	-	-	-	-	•	L.6,573,767

The hypothesis in Table D, is that of the continuance of war until 1820, and afterwards alternate periods of ten years peace and war; annual loans of 25 millions, during war, but reduced in the existing system after 1821 to 24 millions; interest during war 5 per cent., during peace 4 per cent. According to this hypothesis, the national debt is greater by the new system, at the end of 7 years war, by - - L42,000,234 And the saving in taxes, - - 35,600,907

Excess increase of debt above saving in taxes, - - - - L.6,399,327

During the next ten years of peace, the sum applicable to the discharge of the public debt, in the existing system, is greater by - L.114,435,708

And the aggregate of additional taxes in that period is greater by - 81,383,850

Excess of sum applicable to discharge of debt above additional taxes, - L.33,051,858

V. The next circumstance which claims our attention is the periods at which additional taxes are proposed by the new system. All the late systems of finance have held forth a distant prospect, that after a certain period, more or lsss remote, the national revenue would become equal to its expenditure, even in a state of continued warfare, and therefore no further taxes would be needed. If that period should ever arrive, it is obvious that the amount of taxes then levied must be much greater

than what would at present cover our expense. For what reasons then do we not now raise them to that amount? We shall not ascribe this to our propensity to stave off the evil day at present, and leave posterity to provide for themselves as they can. In whatever degree this motive may operate, it is too unprincipled to be openly avowed. The only other reasons we remember to have heard adduced, are, that the nation is increasing in wealth, and will be better able to bear heavier taxes at a future time; and that a sudden increase of taxes would occasion so much discontent that a minister dare not attempt it; whereas taxes, at first moderate, and increased at intervals, are submitted to with less reluctance, and do not become unproductive in an equal degree by occasioning the disuse of the articles taxed. We shall not at present enter into a discussion of these reasons. Whether we refer the deferred and gradual increase of taxation to either or both of them, or to any other that can be imagined, they concur in this point, that additional taxes should be imposed annually and equally while the public necessities continue the same. By the new system, the amount of taxes imposed in different years is very unequal. According to the first hypothesis there are no additional taxes imposed in the years 1814, 1815, and 1816. In 1817, the additional taxes come near to L.1,300,000; in 1818, they fall below L.700,000; in each of the three following years they amount to about L.2,000,000; in 1822, there are no additional taxes; and in 1823, the additional taxes little exceed L.600,000. Like inequalities occur in the following years, and according to the other suppositions. The reason of this is, that the amount of taxes imposed is regulated by the periods at which the loans of former years are declared to have been redeemed. If several loans, or one large loan fall in, no new taxes are imposed. If none fall in

within the year, a large amount of additional taxes is had recourse to. Thus the amount of taxes to be imposed in future years is made to depend on the amount of loans contracted many years ago, and the period of the redemption of these loans, as ascertained by their terms, and the sinking funds appropriated to them at their contraction, under the regulations of the new system. There seems to be no good reason for regulating the periods of additional taxation in this manner. The several loans constitute the public debt, united into one indiscriminate mass. If the means adopted to meet the increase of this debt be a progressive increase of taxation, the progress ought to be uniform; or if otherwise, any diversity ought to arise from the circumstances and exigencies of the times when the taxes are imposed, and not from the discharge of former loans as estimated by an artificial system. In time of war, there is no real discharge of debt, but an annual contraction of debt, equal to the difference between the capitals created and the capitals redeemed.

VI. An advantage of a very extraordinary kind is affirmed to result from this system. "The principal advantage of the proposed plan in time of peace, would be the facility of keeping in reserve a large sum (suppose L.100,000,000) as a resource in the case of the renewal of hostilities. This fund, which would be formed in a few years by the redeemed stock standing in the name of the commissioners, would be continually increasing, unless checked in the manner above-mentioned; and in no case should be reduced below such a sum as may be thought amply sufficient to support the confidence of the country at home, and maintain its dignity abroad. It would indeed be such a treasure as no other country has ever possessed, and the first example of an

immense accumulation of public property, formed without the impoverishment of any individual, or any embarrassment of the general circulation."\*

We are altogether at a loss to form a distinct conception of the nature of the valuable treasure here held forth. So soon as any stock is purchased by the commissioners, and stands invested in their name, a like amount of the public debt is in fact discharged .-Whether a parliamentary declaration to that effect be made or not, is only a matter of form. If the money remain vested in the name of the commissioners, no doubt it may be transferred again to purchasers, in the stock exchanged, when war breaks out anew, and money may be raised for the public in this manner; but this is in every respect a new loan. It is an application to the public to invest their capital in the purchase of this dormant stock. The capitalists must be possessed of the sum wanted; and they will not part with it, except upon terms from which they derive a profit. They would do this with equal readiness, if a loan was proposed to them in the ordinary form. We can discover no facility or advantage which the public could derive from a loan conducted in this manner, rather than any other. Indeed the inefficacy of this reserved treasure appears so clear, that we almost doubt whether we have rightly apprehended the nature of the resource held forth: but we are not able to affix any other meaning to it.

If it be said that the whole capital of funded debt was once in circulation, and although a part of it is for a time withdrawn, it may be brought into circulation again, this amounts to no more than that the nation having once borne a greater amount of debt than at the time alluded to, it may be expected to be able to bear a

like amount again. This may be affirmed either of a nation or a private estate, if other circumstances remain the same; but it is not much to the purpose. The proprietor of the private estate, who has experienced the hardships that result from being in debt, will feel little solace, after these are relieved, from the consideration that if he chooses to engage in a fresh career of extravagance, he will only be plunged again into the same difficulties; and if ever the public be partially delivered from that load of debt which cramps its national operations, and occasions privations to the individuals who compose the public, it will be no great source of rejoicing that it may engage in new wars for a season without undergoing greater hardships than those which it had experienced before.

It is true, that if the taxes imposed during war for the purpose of a sinking fund, be continued after peace is restored, till a large sum (suppose L.100,000,000) be vested in the hands of the commissioners, the public, upon the renewal of war, may spend to that amount without imposing fresh taxes. This amounts to no more than that if we chose, during peace, to submit to the hardships of war taxation after our debt is partially discharged, we may engage again in war, without bearing heavier burdens than those from which we might have been delivered, if we had repealed the taxes as the debt was discharged.

VII. In examining this and the other systems of finance, we have chiefly confined ourselves to a view of the effects expected from them, during the first 16 years or thereby from their establishment. Such a period is fully sufficient to ascertain their merits. In the Tables annexed to the plan, their operation is traced for a much longer time. That of the sinking fund, Table C. 2. is

extended as far as the year 1866; and we are informed in a note, that the remaining debt will be redeemed according to the existing system in the year 1912, and according to the new system in the year 1875. It is altogether unnecessary to trace their operation to such distant periods. It is morally impossible any system can be adhered to so long. Sir Robert Walpole's sinking fund was never supported with efficacy. Mr. Pitt's sinking fund commenced in 1786, and was corroborated in 1792; considerably infringed on in 1798; underwent a great alteration in 1802; was laid aside for lord Henry Petty's plan in 1807; revived in 1808; and is now superseded by Mr. Vansittart's plan in 1813; and it may be almost certainly foreseen that measures different from those now proposed will be had recourse to by succeeding financiers. This will arise, not only from the different views of different men, but from the change of circumstances which the fluctuation of human affairs always induces. The proper measures to be followed in that great department of national administration half a century hence, will depend on the exigencies and resources of the time, and cannot be foreseen at present.

## SECTION V.

General Observations on Sinking Funds.

I. In the resolutions frequently proposed by ministry to parliament, in order to exhibit a general and comparative view of the state of our finance at different periods, the proportion of the sum applicable to the discharge of debt, to the debt itself, is introduced, and seems to be considered as an important circumstance. This proportion in 1786, was  $\frac{1}{13}$ , in 1793 it was  $\frac{1}{16}$ 57, 1803,  $\frac{1}{77}$ , in 1809,  $\frac{1}{14}$ , and in 1813,  $\frac{1}{44}$ . The inference drawn from this growing proportion is, that although the national debt has greatly increased, the means provided for its discharge have increased in a still higher degree, and therefore its present magnitude affords no cause of alarm.

The extent of the sinking fund is artificial, and may be brought, by a mere change in the arrangement of the public accounts, to bear any proportion to the amount of debt, without the slightest advantage, or any tendency to promote its discharge. In time of war, we raise a certain sum by taxes for the expense of the year, and borrow what further is wanted. If a sinking fund be maintained, the sums appropriated are deducted from what would have otherwise been expended on the war, and a greater loan is required. We may throw into the sinking fund any share of the revenue we please. We have only to add as much to the loan, and we shall raise a larger sum in the form of loan, with the same facility, by the effect of the sums thrown into the money market for the stock purchased by the commissioners. In time of war the sinking fund is nominal; in time of peace a large sinking fund will discharge the debt more quickly; but this amounts to no more than that a continuance of the taxes, which we paid in war, after peace is restored, will be attended with a speedier reduction of debt, than what would take place if a large part of these taxes were repealed.

II. A similar circumstance, held forth to ease the alarms arising from the magnitude of the national debt, is the progress already made in its discharge by the sinking fund, and the large sum redeemed. We are told

that these operations have succeeded beyond expectation, and that the whole debt existing in 1786, amounting to 238 millions, is already paid off. This is altogether fictitious and delusive. We may pay off as much debt as we please at any time by borrowing: but the only real alteration in the state of our finance is the difference between the debt contracted and the debt paid off; and while the former of these exceeds the latter, our situation is growing worse to the extent of that difference.

A private gentleman, whose estate is incumbered, may, if he have any credit, pay off all his debt every year. by borrowing from other hands; but if he spends more than his free income, his embarrassments will continually increase, and his affairs are so much the worse by being conducted in this manner, from the fees he pays to his agents. The absurdity of deriving any satisfaction from this annual discharge of his debts will appear still stronger, if we suppose him, instead of borrowing from other hands, only to renew the securities to the same creditors annually, paying a fee to the agents, and a douceur to the creditors themselves on the renewal. All these observations are equally applicable to the debt of a nation, conducted as ours is. It would not be impracticable, or very difficult, to redeem our whole debt in any year, if the measures we follow be redemption. It would only require a large loan every month, and the large sums we were thus enabled to pay would supply the funds for these loans. Our capitalists would be well pleased to promote these loans, as they would derive a bonus from each. Such a system would be ruinous in the extreme; and the system we follow is the same on a smaller scale, and is therefore only pernicious in a less degree.

In the year 1786 our funded debt was 238 millions. We have paid all this off, but we have contracted (exclusive of the loans of 1813) a new debt of 574 millions. Does not this amount to the same, as that we have paid no debt at all, but contracted an additional debt of 336 millions?

III. The dangers, arising from the magnitude and progressive increase of the national debt, ought to be laid before the public without exaggeration, but without palliation. Another source of alarm has been started of late years, of the evils to be apprehended from too great an increase of the sinking fund, and too rapid a discharge of the national debt, or too sudden a repeal of taxes. These fears were first announced (at least with any degree of energy) on the publication of lord Henry Petty's Plan of Finance, in 1807; and they seem to have taken considerable possession of the public mind. "It I the plan of 1802] would throw such large and disproportioned sums into the public market, in the latter years of its operation, as might produce a very dangerous depreciation of the value of money. Many inconveniences might also arise from the sudden stop which might be put to the application of these sums, when the whole debt shall have been redeemed, and from the no less sudden change in the price of all commodities, which must follow from taking off, at one and the same moment, taxes to an extent then probably much exceeding 30 millions."\*-" This successive redemption is, indeed, a point of no small importance to the regulation of the money market, as the rate of interest, and the value of money might be very inconveniently affected by the too rapid increase, or the too sudden reduction of the sums brought into circulation by the sinking fund. It should not, therefore, be suffered to

<sup>\*</sup> Plan of Finance, 1807, p. 14:

accumulate for too long a period, while, on the other hand, it should not be too much diminished, by extinguishing at once too large a proportion of the public debt."\* We have seen the fears of these inconveniencies urged in some private publications, in still stronger terms. They appear to us altogether groundless.

The operation of the sinking fund during war, when loans to a higher amount are annually contracted, we trust we have evinced to be altogether fictitious. It is not probable, whatever be the continuance of the war, that our taxes will be raised to the measure of our war expenditure; but they are likely to exceed much what is wanted for a peace establishment; and the excess is likely to be larger, the longer the war is continued. We shall then be possessed of a surplus revenue at the restoration of peace, which we may either diminish or annihilate altogether, by the repeal of taxes, or apply to the discharge of the public debt. It is proper and probable that we shall embrace both measures; and the proportions of surplus revenue to be disposed of, the one way or the other, are completely at command, and ought to be determined from the state of affairs at the time, and not from the results of an artificial system, laid down many years before.

It is generally believed that, when the present war is terminated, prudence will require us to support a higher establishment than we ever did during any former peace. This prospect alone may allay our fear of bad consequences from too sudden a discharge of debt.

Those who believe, as we do, that the load of public debt is a great evil, and that its discharge would be a great deliverance, may at the same time admit, that a sudden alteration, however beneficial in its ultimate result, would be attended with serious inconveniences,

<sup>\*</sup> Plan of Finance, 1813, p. 9.

and that every precaution should be employed to prevent or alleviate these.

The inconveniences apprehended, arise from the difficulty of employing the capital paid off, and the reduction of the rate of interest.

A low rate of interest is generally esteemed beneficial. and is said to have prevailed in the wealthiest and most flourishing nations, while the rate has been much higher in those that were in a semibarbarous state. We do not admit this doctrine without considerable qualification; but we could not discuss the argument without a length of digression unsuitable to this place.

We have no doubt that the whole capital, at present invested in the funds, may be beneficially employed in agriculture, manufacture, and commerce, and thereby prove a source of increasing wealth to the country: but this cannot be done all at once. These objects must expand by degrees, and no more capital should be paid off in any year than can be otherwise disposed of to advantage. We have little apprehension that we should have more to offer; but, if the case should be otherwise, we can restrict it, in any degree, by the repeal of taxes.

Apprehensions of inconveniences from the sudden amelioration of the circumstances of the middling and lower ranks, arising from the repeal of taxes, have been We cannot enter into these views. insinuated. numerous part of the community, which has for some time laboured under great privations, when they feel this relief, will afford themselves a greater share of the comforts of life; and by their additional consumption, give encouragement to agriculture, manufacture, and trade. Excess, in a certain measure, will be the consequence of affluence in every rank; but it will not be maintained that, in order to avoid that evil, nations should always be kept in a state of depression. The sudden dismission of many of the officers employed in

collecting the revenue is surely too trivial an object, and admits of too obvious remedies to merit notice. One evil apprehended from the sudden repeal of taxes is the loss which dealers would sustain, by the fall in price of the commodities on hand, on which the taxes were repealed. This class of men gained by the rise in price of commodities on hand when the taxes were imposed. We would not, however, wish them to undergo a loss on their repeal. This might be greatly alleviated, if not altogether prevented, by allowing a considerable time between the enactment and repeal, and by other regulations suited to that purpose.

A funded capital, transferrable as ours, is considered to be beneficial, as affording an easy and secure way of investing small sums belonging to persons in the lower ranks of life—the hard earned savings of industry. There is something in this; but there is no reason to apprehend the amount of our funded debt will ever fall so low as to be insufficient for that purpose.

## SECTION VI.

Examination of the System of Funding by Increase of Capital.

In the early part of the funding system, the capital assigned to the public creditor seldom exceeded the sum advanced by him. We find only two slight deviations from this rule during the seven years' war, and one in the American war, before 1781: but after that year, when the difficulty of raising loans increased, capitals were assigned to the creditors much higher than the

sums advanced; and this practice has been continued since to a great extent.

It has been maintained in the house of commons, on the part of ministry, and, if we mistake not, even admitted by the opposition, that it was the duty of a financier to raise the loan at the least annual expense it could be procured for, without regard to the amount of the nominal capital. We apprehend that this opinion is indefensible, except upon the supposition that all views of discharging the national debt, or any part of it, are forever laid aside, and that the measures founded on it are very pernicious. The nation ought to pay no more in discharge of debt than the sum borrowed, together with the interest during the time the debt subsists. the system now followed, it pays besides, the excess of the capital assigned above the sum borrowed, in case the redemption be at par: or, if the price of the funds enable the commissioners to redeem the debt on lower terms, the nation pays, in addition to the sum borrowed. the difference between the price of stock at the times of borrowing and paying, which is always great.

The terms of the debt contracted during the American war, and since the commencement of the war in 1793, have been already given. The excess of the capital funded, above the moncy borrowed, is as follows:

	Sums raised.	Capital funded
Debt contracted during American war, Loans from 1793 to 1812, inclusive, Bills funded in that period,	91,763,842 322,358,532 62,258,173	
of which redeemed by the Commis	476,380,547	689,049,880
Of which redeemed by the Commis- missioners,	133,536,836	210,461,356
	342,843,711	478,588,524 342,843,711
Excess of capital funded above sums rais	135,744,813	

Thus it appears, that if the funded debt, contracted since the commencement of the American war, were paid off at par, the nation would pay above 135 millions more than it ever received, which is about four-tenths of the debt contracted. The far greater part of this excess has risen since the war of 1793, and almost the whole of it since the year 1780.

The national creditors are not obliged to accept of payment under par, that is, a sum equal to their nominal capital: but as they cannot, like private creditors, demand payment, and as the price of those funds which bear a low rate of interest is generally under par, it has been in the power of the public, in former intervals of peace, to pay off part of the national debt considerably under par, with the voluntary consent of the creditors; and the same end is now obtained, in a more constant manner, by the purchases made by the commissioners.

Dr. Price was of opinion, at the time he wrote, that the three per cents. on the return of peace, would rise to par, or above it; and he considered that as a desirable event. Whether it would be so, we may hesitate to pronounce, when we attend to the variety of interests involved. It could not take place without a general reduction of the rate of interest; and this must be accompanied by a like reduction of the profits on trade and manufacture. It would obstruct the redemption of the national debt under par, and prevent its being accomplished, unless at the loss abovementioned.

But we do not consider the rising of the three per cents. to par as a probable event; and had Dr. Price lived to see the magnitude which our debt has now attained, it is likely he would have been of the same opinion. From the establishment of the sinking fund to the 1st of February 1791, there was L.6,772,350 of the three per cents. redeemed for L.5,424,592, being

at the rate of 80 nearly. It is therefore a probable supposition, that on the return of a steady peace, the three per cents. may rise to 80.

Now, if we suppose the three per cents. redeemed at 30, and the four per cents. and five per cents. at par, the sum required for the redemption of the above-mentioned debt would be.

L.323,846,354 Capital in three per cents

at 80, - L.259,077,083

154,742,170 Capital in 4 and 5 per cents at par,

154,742,170

L.478,588,524 redeemed for L. sum borrowed.

L.413,819,253 342,843,711

\_\_\_\_\_

L.60,975,542

Hence the loss incurred by the public on this favourable supposition would be 60 millions, in discharging the whole capital, and a like proportion for any part of it that might be discharged during a period of peace.

This system was only in its infancy when Dr. Price wrote, and he censures it in the following terms:—" In 1759, the lenders of L.6,600,000 were entitled to a capital of L.115 for every L.100 subscribed, or L.7,590,000 in the stock of the three per cent. annuities: the consequence of which must be, that, in discharging this debt, 15 per cent. or nearly a million, must be paid, which was never received, and by which nothing has been gained. Were a person in private life, to borrow L.100, on condition it should be reckoned L.200 borrowed, at two and a half per cent. he would, by subjecting himself to the necessity (if he ever discharged the debt,) of paying double the sum he received, gain somewhat of the air of borrowing at two and a half per cent, though he really

borrowed at five per cent.: but would such a person be thought in his senses? One cannot, indeed, without pain, consider how needlessly the capital of our debts has been, in several instances, increased.—Thus do spend-thrifts go on, loading their estates with debt, careless what difficulties they throw on the discharge of the principal, leaving that to their successors, and satisfied with any expedients that will make things do their time."\*

This censure, severe as it is, appears in a great measure deserved. We ought, however, to pay attention to any saving of interest, which is the inducement for contracting the public debt in the manner that has been followed.

The natural proportion of the price of capital in the three per cent. four per cent. and five per cent. funds. is the same as that of the respective rates of interest. Thus, if the five per cents. be at par, the four per cents. should be at 80, and the three per cents. at 60; and this proportion, except some slight deviations from transient causes, would continue to hold when the prices rose, provided the debt was irredeemable. The only object, in that case, in which the national creditors are interested, is to draw an annuity for the money they advance; and it would be to them a matter of indifference what denomination be given to the fund from which the dividends were drawn. If the three per cents, rose to 75, the four per cents. should rise to 100, and the five per cents. to 125: but as all the funds are redeemable at par, the actual price can never much exceed it. So soon as the five per cents. rise above par, the financier will offer payment, and by doing so, induce the creditors to submit to

<sup>\*</sup> Preface to 3d ed. of Observations on Reversionary Annuities. † See Note XXIX.

a reduction of interest. The holders of stock in a three per cent. or four per cent. fund, have thus a prospect of gain by the rise of value, in which the five per cent. stockholders do not participate; and, in like manner, when the three per cents. rise above 75, the holders have a further gain in which the four per cent. stockholders do not participate. In consequence of these expectations, the price of four per cents. is higher, compared with that of the five per cents.; and the price of the three per cents. higher than that of either of the others, than the proportion of the rates of interest; and what he gains, the public loses, at re-payment on redemption.

In order to estimate the extent of the difference of interest occasioned by funding in capitals of different sorts, we may consider the rates of interest paid by the public on those loans, and the sums funded, where the contract was made at one rate only, and not incumbered with a long annuity.

There have been eleven loans of this sort, in the three per cents. since the commencement of the war in 1793, the amount borrowed being L.158,650,000, and the sum funded L.259,215,875, the interest of which is L.7,776,476, being at the rate of L.4. 18s. per cent. on the sum borrowed; the particulars being as follows:

	Sums raised.	Sums funded.	Interest.
1793,	4,500,000	6,250,000	187,500
1798,	3,000,000	5,624,250	168,727
1799,	12,500,000	21,875,000	656,250
1800.	18,500,000	29,045,000	871,350
1801.	25,500,000	44,816,250	1,344,488
1802,	23,000,000	30,351,375	910,541
1804,	10,000,000	18,200,000	546,000
1805,	20,000,000		1,032,000
1806.	18,000,000		896,400
1810,	8,000,000	11,230,000	336,900
1812,	15,650,000	27,544,000	826,320
	158,650,000	259,215,875	7,776,476

The only loan at 4 per cent. was that of 1808, when L.8,000,000 was raised, and funded for L.9,454,000, the interest of which, L.378,160, is at the rate of L.4. 14s. 6d. per cent.

There have been three loans, and six operations of funding bills, in the 5 per cents., viz.

		Sums raised.	Capital funded	Interest.
1794,	Bills,	1,907,451		96,326
1795,	Bills,	1,490,647	1,609,898	80,495
1796.	Bills,	4,226,727	4,414,074	220,703
	Loyalty loan,	18,000,000	20,124,843	1,006,243
1810,	Bills,	8,311,000	8,581,108	429,055
1811,	Bills,	7,018,700		363,919
	Loan,	4,981,300	5,166,319	258,316
1812,	Bills,	5,431,700	5,866,236	293,312
	Loan,	6,789,625		366,639
		58,157,150	62,300,191	3,115,008

L.58,157,150 money borrowed and bills funded in the 5 per cents. for L.62,800,191, interest L.3,115,009, being at the rate of L.5. 7s. 1d. per cent.

But if the loyalty loan, which was remarkably unfavourable for the public, be set aside, the sum raised is

L.40,157,150 funded in the 5 per cents. for L.42,175,338, interest L.2,108,767, being at the rate of L.5. 5s. per cent. and 7s. more than on the money funded in the 5 per cents.

Another consideration considerably reduces this difference in the interest. In the loans, the public pays the whole interest for the year that the loan is transacted, although the money be advanced by instalments, or discount allowed if the whole be paid up at once. If the lender did not obtain this advantage, he would demand an additional capital at least equivalent to L.2. 10s. in the five per cents. and yielding an interest of 2s. 6d. Nothing similar to this occurs in the transactions of funding bills, from which the greater part of the 5 per cent. stock arises.

Thus, for a difference not exceeding five or six shillings per cent. on the interest, the public incurs almost a certainty of paying L.133 for every L.100 borrowed, and a risk of paying L.166, when the debt comes to be discharged.\*

This simple view of the result is sufficient to reprobate the system of borrowing on an advance of capital, and a low nominal interest. The capital funded should never exceed the sum raised, and such a rate of interest should be allowed on this capital as the lender is willing to accept of. At the present price of the funds, money cannot be borrowed at 5 per cent.; and perhaps it might be thought improper to give, in direct terms, a higher rate of interest than can be legally taken in private transactions, though there is a necessity for doing so in an indirect manner. To avoid this, the highest rate of interest on the capital might be fixed at 5 per cent; and in addition to this, when necessary, a long annuity might be granted; and when the funds are higher, the

rate of interest might be fixed at three or four per cent. together with a long annuity, if necessary.

It is impossible to go over this subject without being struck with the great variety of modes that have been resorted to in raising money.—From 1793 to 1812 inclusive, there have been twenty-five loans, of which fifteen have been in three per cents. and four of these have been aided by a long annuity. One has been funded in the four per cents. and three in the five per cents. Five have been funded partly in the three per cents, and partly in the four per cents.; all of them accompanied by a long annuity: and one partly in the three per cents, and partly in the five per cents.

In the same period there have been ten operations of funding bills, of which six have been altogether in the five per cents.; two partly in the four per cents. and partly in the five per cents.; and two, jointly in the three, four, and five per cents.; and to one of these a long annuity is attached.

### Note I .- Page 17.

The increase of circulating medium, of whatever kind, by deteriorating the value of money, enhances the money price of manufactures and native produce, and thereby obstructs, cateris paribus, their sale in foreign markets. In this respect, paper money is always disadvantageous. It may give encouragement to industry by extending private credit, and thereby prove beneficial; but its application in this way is apt to be carried too far. The consideration of its influence upon the rate of exchange with foreign countries, and the other effects it produces, would lead us beyond the bounds of our present subject.

### Note II.—Page 22.

Since the imposition of war taxes in 1798, the permanent revenue has been divided into two great branches:

1st, The consolidated fund, consisting of all the branches existing in 1786, when Mr. Pitt's sinking fund was established, and many taxes which have been imposed since, and charged with the interest of the public debt, the sums payable to the commissioners for its redemption, the allowance to the civil list, and pensions and other grants by parliament. The surplus, which is always considerable, is applied to the current services of the year.

2d, The war taxes, consisting of the property-tax, the convoy-tax, and some other articles, and charged with the interest, &c. of the loans of 1807 and 1811, the amount of which is transferred to the consolidated fund.

To these may be added,

3d, The duties granted annually. These were formerly the land and malt-tax: Since the land-tax was rendered perpetual, certain duties on sugar and tobacco, and on offices, pensions, and salaries, besides the malt-tax, have been granted annually.

### Note III .- Page 28.

The amount of foreign property in the British funds, as ascertained by the claims of exemption from property-tax in 1806, was L.18,528,666, besides L.17,147 per annum of terminable annuities. This account does not include the bank stock, the duty on the dividends of which are paid by the company. The whole amount may be estimated at about 22 millions, being about 1-25th of the funded debt then existing. The foreign property in the British funds, in 1762, has been estimated at 18 millions, being about 1-7th of the funded debt at that time.

# Note IV.—Page 36.

PARADOXICAL effects are ascribed to the increase of money by compound interest.

One penny put out at the Christian era, at five per cent. compound interest, would, before this time, have increased to a greater sum than could be contained in five hundred millions of earths, all of solid gold.

Mr. Ricard appointed by his will, that the sum of 500 livres should be divided into five portions. The first, at the end of a hundred years, amounting to 13,100 livres, to be laid out in prizes for dissertations proving the lawfulness of putting out money to interest. The second, at the end of two centuries,

amounting to 1,700,000 livres, to be employed in establishing a perpetual fund for prizes in literature and arts, and for virtuous actions. The third, at the end of three centuries, amounting to more than 226 millions of livres, to be employed for establishing patriotic banks, and founding museums with ample establishments. The fourth, at the end of four centuries, amounting to 30,000 millions, to be employed in building a hundred towns in France, containing each 150,000 inhabitants. The fifth, at the end of five centuries, amounting to four millions of millions of livres, to be appropriated for the payment of the national debt of Britain and France,-for producing an annual revenue to be divided among all the powers of Europe.—for buying up useless offices, purchasing a royal domain, increasing the income of the clergy, and abolishing fees for masses,-for maintaining all children born in France till they be three years of age, -for improving waste lands, and bestowing them on married peasants,-for purchasing manors, and exempting the vassals from all servitude,-for founding houses of education, workhouses, houses of health, and asylums for females,-for portioning young women,for conferring honorary rewards on merit;-besides a large surplus to be appropriated at the discretion of his executors.

Dr. Franklin planned a similar will.

It is theoretically true that compound interest may accomlish all these things; but such extravagances rather tend to throw ridicule on the subject, than increase our confidence in its operations.

### Note V .- Page 48.

In early times, all interest for money, or usury, as it was then called, was unlawful. Yet, in defiance of heavy penaltics, necessity enforced the payment of interest, often upon exorbitant terms. The first statute authorising and limiting the rate of interest in England, was in the reign of Henry VIII, in the year 1546, when it was fixed at ten per cent. In the reign of his successor, Edward VI, all interest was again prohibited.

In the year 1572, in the reign of Elizabeth, interest was permitted at the rate of ten per cent. In 1624, in the reign of James I, the rate was reduced to eight per cent. In 1651, during the usurpation of Cromwell, it was reduced to six per cent; and this was confirmed at the restoration. In 1714, it was reduced to five per cent.; at which, as the legal rate, it has continued since.

All these reductions by law seem rather to have followed than anticipated the actual rate of interest, arising from the commercial state of the nation. To compel the lending of money at a lower rate of interest than that which naturally results from existing circumstances, is equally impracticable as to prohibit interest altogether:—but when the actual rate of interest fell below the legal standard, that rate was reduced to prevent particular acts of oppression.

In Italy and other states where commerce was earlier established, interest was reduced sooner and lower than in England. In Scotland, the reduction took place a little later. Interest there was reduced to eight per cent. in the year 1633, being nine years later than in England: and it was reduced to six per cent. in 1661, ten years later than in England.

### Note VI.—Page 49.

THE terms of this tontine were, That the subscribers of L.100. 5s. being distributed into six classes according to their ages, should receive the undermentioned annuities, with benefit of survivorship in their respective classes, till the annuity on the original share amounted to L.1000, after which the surplus is to fall to the public.

plus is to fall to the publi	ıc.							
1st Class, under 20 years	s of	age,	-	-	-	L.4	S	0
2d Class, from 20 to 50,	-	-	-		-	4	5	6
3d Class, from 30 to 40,		-	-	-	-	4	8	6
4th Class, from 40 to 50,	-		-			- 4	13	6
5th Class, from 50 to 60,			-	-		5	1	6
6th Class, above 60,			-		^	- 5	12	0

The amount of annuities granted on these terms (including a subsequent addition) was - - -For the remainder, annuities for 691 years were allowed at the rate of L.4. 5s. for each subscription, as above, amounting to L.24,365 and in order to place those persons who retained their shares in the tontine on the same footing as if the whole had been filled up, the treasury was empowered to nominate lives among persons in public station, to be distributed in the several classes, in the same proportion as the nominees appointed by the subscribers; by whose death, as well as that of the actual holders of the tontine, the benefit of survivorship should be regulated. The amount of annuities entered in these names was L.24,681: thus the sum payable by the public is variable, according as a greater proportion of deaths happens among the real or fictitious nominees.

# Note VII.-Page 51.

THE branches of revenue formerly appropriated to the civil list, were the profits of the post-office; a few branches of the excise and customs; part of the duty on wine licences; the remains of the ancient hereditary revenue; and a further sum of L.120,000, charged on the aggregate fund. At the beginning of the present reign, these branches were added to the aggregate fund, and that fund was charged with an annual payment of L.800,000, as the full and permanent allowance for the civil list. This sum has been since augmented several times, and now amounts to L.958,000, besides allowances to the branches of the royal family; -an augmentation by no means adequate to the deterioration of the value of money during the period; and although considerable sums have been granted to supply the deficiencies of the civil list, the whole money appropriated to it during this reign, is inferior to the produce of the branches of revenue which formerly belonged to it.

### NOTE VIII .- Page 54.

In the account of the public debt presented to the house of commons in 1799, it is said, that "it has been found impracticable to ascertain the amount of the sums raised at different periods, which created the capitals composing the several funds existing prior to 33 Geo. III. Anno 1793."

This avowal of ignorance, which may appear surprising where every means of official information was at command, may excuse a private inquirer, if his statements at an earlier period be imperfect. An error, in the former edition, of stating the sums raised by lotteries during the American war, as being in addition to the loans, is now corrected. We have not attempted a statement of the financial operations by funding bills during that period.

### Note IX.—Page 55.

ALL the loans contracted in the American war were connected with lotteries. The subscribers to the loan of 1776 received for every L.100 subscribed, stock in the 3 per cents.

L.77 10 0

And three lottery tickets (in all 60,000) valued at

L.10. The prizes being funded, the holders of the fortunate tickets received a capital in the same fund of

L.107 10 0

This arrangement was intended to afford a profit on the lottery tickets to the subscribers, and a plan still more beneficial was adopted in the loans of the following years.

The subscribers to the loan of 1777 received 50,000 tickets, being one ticket for every L.100 subscribed.

The subscribers to the loan of 1778 received 48,000 tickets, being eight tickets for every L.1000 subscribed.

The subscribers to the loan of 1779 received 49,000 tickets, being seven tickets for every L.1000 subscribed.

The subscribers to the loan of 1780 received 48,000 tickets,

being four tickets for every L.1000 subscribed.

The subscribers to the loan of 1781 received 48,000 tickets, being four tickets for every L.1000 subscribed.

The subscribers to the loan of 1782 received 40,500 tickets, being three tickets for every L.1000 subscribed.

The subscribers to the loan of 1783 received 48,000 tickets, being four tickets for every L.1000 subscribed.

The subscribers to the loan of 1784 received 36,000 tickets, being six tickets for every L.1000 subscribed.

The subscribers to the loans subsequent to 1776 paid for their tickets at the rate of L.10 in addition to the sum advanced by them for the loans; and the prizes were not funded, as they had been in the seven years' war, and in the lottery of 1776, but were paid to the holders of the fortunate tickets, to the extent of L.10 per ticket, in the spring of the following year.

### Note X .- Page 57.

The following annuities, expired before 1793, were transferred to the commissioners for the redemption of the national debt.

Old long annuities, William and Mary,	-	L.54,881
Annuities, 17 Geo. III	-	- 25,000
Which added to the annuities existing in	1792,	L.79,881 - 1,293,870
Makes up the sum stated by the select co	ommitt	ee
of finance, in 1797,	-	L.1,373,751

### Note XI.-Page 60.

In funding the navy bills, 1797, option was given to the holders to receive capital either in the three per cents. the four

per cents., or the five per cents. at different rates, according to the dates of the bills, as exhibited in the following table:

Bills dated before.

	-3 per	cen	t.	4 per	cen	ıt.	5 per	cer	it.
1st January, 1796, 50th April, 31st July, 27th October,	L.178 176 175 178	19 8	5 93 9 3	137 136	18	91 71 81 1	118	6 12	11‡ 10‡ 11‡ 2

If all the navy bills then funded, had been at the second of these rates, (which were the rates allowed for the exchequer bills funded at the same time) the amount would have stood as follows:—

L.9,293,483 in 3 per cents at L.176 19 93 L.16,438,175
544,982 in 4 per cents at 137 18 74 765,428
1,728,617 in 5 per cents at 118 0 104 2,034,890

L.11,567,082

L.19,238,493

But the amount of navy bills actually funded, was L.11,595,529; therefore the average rates must have been lower than those of the second class.

#### NOTE XII .- Page 61.

The loan of L.18,000,000 in the year 1796, (commonly called the Loyalty Loan,) was contracted on the following terms: The subscribers of L.100, received a capital of L.112. 10s. in a separate fund at five per cent.; and it was agreed that the holders, two years after the ratification of a definitive treaty of peace, should be entitled either to receive payment, or to have their stock converted into three per cents. at the rate of L.133. 6s. 8d. for L.100 capital: but this loan is not redeemable on the part of government, till three years after the other five per cents. be paid. The subscription was filled up in a few days, the sum funded being L.20,124,843.

This agreement came to be implemented in 1804. The consequent operations were continued for several years, and

some portion of this loan has been paid every year since; but these are all introduced in the table, in the year 1805.

In consequence of the renewal of the war, the price of the funds was so low, that the holders of the loyalty would have been losers by accepting of L.133. 6s. 8d. in the three per cents. It was necessary, therefore, either to pay them, or offer them more advantageous terms.

By act 44 Geo. III, cap. 99, the holders of the loyalty loan were intitled to receive L.100 in the five per cent. consols; and so much additional in the three per cent. reduced, as would make up the value of L.100, at the current price.

By act 45 Geo. III, cap. 8, the holders of L.4,448,817 were to receive so much capital in the five per cent. consols, or the three per cent. reduced, as would be equal in value to L.100; and so much additional capital in the three per cents. reduced, as would be equal to ten shillings more; and these terms were accepted by the holders of about three-fourths of that sum.

By act 45 Geo. III, cap. 73, the same terms were granted to other holders of the loyalty loan, to the extent of L.1,254,629.

The money required to pay such as did not accept of these terms was obtained by allowing the same terms in the way of loan; and the capital granted in the five per cents. for every L.100 advanced, as settled by the average price of stock for the ten preceding days, was L.113. 13s. 4d.

The holders of the five per cent. annuities 1802, amount, L.2,227,612, which was joined to the loyalty loan, were entitled to the same terms.

tled to the same terms.

The effect of these operations was to make an addition to the three per cents. of - - - L.7,426,233

And to subtract from the five per cents. - 4,045,502

Making an addition to the funded debt of L.3,380,731

And there has been paid of the lovalty loan. L.1,762,394

The pa	rticulars	are as	follows	:
--------	-----------	--------	---------	---

		The part	iculais aic	as tollows.	
	Sums transfer- red from loyal- ty loan.				Capitals added to Sper. cts. and 5 per cts. cons.
1804	13,263,553	And an ad	ditional c	r cent. cons. apital grante	
1805	2,678,561	subscribed And an ad Afterward	lditional c	per cent. redu	- 1,785,707
	2,019,661	subscribed an addi	into 5 pe	to 3 per cents er cent. cons tal granted in	and the
	1,005,290 18,967,067	same of borrowed off loyal		ent. cons. to	265,018
		And an a	dditional c	capital of	- 130,436
	Sums a	dded to 5	per cent. c	apital, -	395,454
	ums transfei cents as abo oyalty loan p	ove,	1806, 1807, 1808, 1809, 1810, 1811, 1812,	L.979,257 336,088 153,697 60,867 18,776 113,416 100,292	L.2,678,561
Sı	ums deducted Sums a			cons. as abov	L.4,440,956 e \$95,454
A		e deducted		er cents., ty loan is as	L.4,045,502
41		t loyalty le		y 10an 15 as	L.20,124,843
		er cents. 18			2,227,612
			Carried	forward,	L.22,352,455

Brought forward, L.22,352,455 Sums transerred as above, L.18,967,067 Sums paid off as above, 1,762,394 20,729,461 Remaining of loyalty loan, 1st Feb. 1812, L.1,622,994					
Sums paid off as above, 1,762,394 20,729,461		Brough	t forward,	L.22,	352,455
20,729,461	Sums transerred as al	bove,	L.18,967,0	67	- 100
,	Sums paid off as above	re,	1,762,3	94	
Pamaining of lavelty lean 1st Feb 1919 I 1 600 004				20,	729,461
Remaining of Toyatty Toan, 18t Feb. 1012, 12.1,022,334	Remaining of loya	lty loan,	1st Feb. 181	12, L.1,	522,994
By these operations on the loyalty loan, there is	By these operations on	the loy	alty loan, tl	nere is	
added to the interest on the public debt, L.20,513	added to the interest	on the p	ublic debt,	L	.20,513
And to the management, 1,682	And to the management	t,		•	1,682
L.22,195				L	.22,195

### Note XIII .- Pages 64 and 68.

A METHOD was resorted to in adjusting the terms of the loan 1802, which indicated considerable pressure on our resources: L.125 was granted in the three per cents.; and as part of the annuities for terms of years expired in 1808, an additional capital was granted to complete the necessary emolument, the interest of which was deferred till these annuities should expire. Thus the relief in view, by the falling in of these annuities, was disappointed to a certain extent. The bidding for the loan was on this deferred stock, and it was taken at L.6. 19s. 3d.

### NOTE XIV.—Page 67.

The loan of 1807 was raised on lord Henry Petty's plan an account of which is given, page 85, &c. L,12,000,000 was charged on the war taxes, and L.1,200,000 of these taxes mortgaged for interest and redemption. The remaining L.200,000 was raised as a supplementary loan in the common manner, with a sinking fund of one per cent. A separate account is kept of this loan: but this plan, though intended to be perpetual, was never followed out afterwards.

### NOTE XV.-Page 69.

The loan of 1809 was raised at L.60 in the three per centreduced, L.60 in the four per cent. cons. and a long annuity of 8s. 10d. L.600,000 of this loan was for Portugal; and instead of distributing that sum among the different funds charged with the general loan, L.895,522 was set aside in the three per cent. reduced, as an equivalent, and a sinking fund of L.30,000 provided for its redemption.

### NOTE XVI.-Page 69.

An option was given this year to the holders of the exchequer bills proposed to be funded, that they might receive either L.103. 5s. in the five per cent. cons., or L.31. 8s in the five per cents. and L.26. 5s. in the four per cents. A similar option was given next year.

### Note XVII .- Pages 57 and 74.

Annurries for lives have been granted at various times, to the amount of L.151,437, exclusive of those which were converted, or entirely fallen in before 1786; generally on single lives; sometimes on two or three lives; and sometimes with the benefit of survivorship. They were reduced by death in 1786, to L.94,878; at which time the present sinking fund was established, and the sums saved by their further reduction, appointed to be carried to that fund. They were reduced in 1798 to L.79,185; in 1802, to L.73,796; and in 1812, to L.65,571; and as a considerable part of this last sum has not been demanded for these three years, the reduction by death is probably greater. The particulars of the original amount of these annuities; their state at the commencement of the

sinking fund; and their present state, are exhibited in the following table:

ACTS.	Original amount.	Expired before 1786.	Remain- ing 1786.	Expired from 1786 to 1813,	Remain- ing 1813.
5 Will. and Mary, 18 Geo. II, 19 Ditto, 30 Ditto, 6 Geo. III, tontine, 18 Ditto, 19 Ditto, 29 Ditto, tontine,	22,500 45,000 33,750	9,183 - 80 143	12,318 22,467 24,567 540 2,769	8,195 4,034 7,517 8,406 232 923	8,284 14,949 16,161 540 2,538 4,252 18,442
Addition to tontine,	151,032		94,473 405	29,307	65,166 405

Amount of annuities granted for years or lives, L.1,729,731 Addition to tontine of 1789, - 405

L.1,730,137

Deduct annuities fallen in by expiry of the term in 1805, 6, 7, and 8, - - L.494,656

By death of annuitants from 1786 to

1813, - - 29,307

----

L.523,963 Addition to tontine, - 405 523,963

Sum deducted from annuities in Tab. II, L.523,557 L.1,206,174
Add life annuities for capital converted, - 195,673

Amount of annuities existing 1st February, 1813, L.1,341,847

### NOTE XVIII .- Page 74.

An account of the allowances for the management of the national debt is given, page 78 and 79. It has been diminish-

ed by the reduction of the rate,—by the falling in of annuities,—the redemption of the capital by the sinking fund,—and the transferrence for land tax. It was thought unnecessary to introduce the portions of abatement in the statement of each year's charge, and the whole is deducted at the end of Table II.

The savings in management by the reduction of the rate, and annuities fallen in, is - - L.54,493

For capital redeemed by the sinking fund, - 71,556

For capital transferred for purchase of land tax, 8,295

L.134,344

For capital converted into life annuities, - 667

# Note XIX .- Page 83.

L.135.011

The interest, &c. of all the debt, whether existing at the establishment of the consolidated fund, or contracted since, as well as the civil list, and other parliamentary grants, are charged on the consolidated fund; and it is credited with all the taxes in force at its commencement, or imposed since, applicable to these purposes:—but the articles on both sides preceding 1803, are now charged promiscuously; and the charges on the loans since 1803, are placed against the branches of revenue appropriated to each.

The interest, &c. of the loan 1803, is charged on L.250,000 reserved out of the consolidated customs; L.59,965 from the consolidated stamp duties; and a variable sum from the assessed taxes.

The interest, &c. of the loan 1804, is charged on the consolidated stamp duties, which were augmented by a duty on the transfer of property according to its value.

The interest, &c. of the loans 1805, is charged on consolidated stamp duties and customs, to which certain additions were made; on additional postage; additional duty on horses; and additional excise, on salt, auctions, bricks, coffee, cyder, glass, vinegar, and wine.

The interest, &c. of the loan 1806, is charged on additional duties on wine and spirits; an addition of ten per cent. on assessed taxes; and a small charge on the stamp duties.

The interest, &c. of the loan 1807, is charged on the war taxes, agreeably to lord Henry Petty's system.

The interest, &c. of the loans 1808, is charged on additional assessed taxes and stamp duties. The short annuities, now fallen in, and savings by the reduction of the rate of management, were brought in aid of this year's charge.

The interest, &c. of the loans 1809, was charged on the war taxes, except an allowance of L.105,000 from the consolidated customs.

The interest, &c. of the loans 1810, was charged on the surplus of stamp duties, produced by their increase and consolidation.

The interest, &c. of the exchequer bills funded in 1811, was charged on additional duties on spirits; and that of the loan, on the war taxes: to replace which, additional duties were imposed on timber, ashes, and foreign linen, and added to the war taxes.

The interest, &c. of the debt contracted 1812, was charged on additional assessed taxes; additional duties on glass, hides, tobacco, and snuff; and additional postage.

The sum required by the system adopted in 1813, is charged on additional duty on tobacco, additional customs, (except on tea, sugar, wine, raw silk, and cotton wool,) additional duty on French wine, and additional war taxes on imports and exports.

### NOTE XX .- Page 84.

The term of forty-five years was mentioned when the one per cent. sinking fund was announced, as that in which each loan would be repaid at furthest. The actual term depends upon the rate of interest, and the comparative prices of stock when the debt is contracted, and during the period of its redenption.

Supposing these equal, and the sinking fund 1-100th of the sum borrowed, the periods required for redemption are,

sorro ca, and perso.			
At 3 per cent. inte	rest,	-	47 years.
At 3½ per cent.	-	- "	44 years.
At 4 per cent.	-	-	41 years.
At 5 per cent		_	37 veare

But if the loan be funded in the three per cents. at 60, and therefore the sinking fund 1-60th of the sum borrowed, the periods required for redemption are,

At 3 per cent.	-	-	35 years
At 3½ per cent.	-	-	33 years
At 4 per cent.	-	-	31 years
At 5 per cent.		-	29 years

### NOTE XXI.-Page 92.

To place the sinking fund proposed on the loans, upon Mr. Vansittart's plan, in a clear point of view, we shall detail its application to the financial operations of the year 1813.\*

11		
agent street street in	Sums borrowed	Capitals funded.
Exchequer bills funded at L.115. 10s. in 5 per cents.  Ditto funded at L.139 in 4 per cents.  Loan funded at L.170 in 3 per cents.	12,000,000 3,755,700	13,860,000 5,220,423 35,700,000
	36,755,700	54,780,423
Estimated sum applicable to the dis- charge of the national debt, 1st Fe- bruary 1813,	13,013,914 23,741,786	

'The sinking fund to be provided on the former is 1 per cent.
on the funded capital, and on the latter, one half of the interest.

<sup>\*</sup> See act 53 Geo. III, cap. 95.

The charge on the former part is, funded for	
	93,000 56,374
Management,	49,374 4,580 52,693
Amount charge on former part, L.9	06,647
The charge on the latter part is,	
Ex. Bills, L.2,741,786 L.3,811,083 Interest, L.1 One half, Management,	76,221
Amount charge on Exchequer bills, L.2	29,808
Loan, 21,000,000 35,700,000 Interest, L.1,00	71,000
L.23,741,786 L.39,511,083 One half, 53,13,013,914 15,269,340 Long annuity, 3	
L.36,755,700 L.54,780,423 Management,	12,878
Amount charge on loan, L.1,70 on Exchequer bills, 25	08,628
Amount charge on latter part, L.1,98 on former part, 90	88,436 06,647
Whole charge, L.2,84	5,084
And the sinking fund is, One per cent. on former part, - L.15  Half interest on latter part, - L.76,221  and 535,500	2,693
·	1,721
Whole sinking fund on debt of 1813, - L.76	4,414

Now, to meet the above charge of - L.2,845,084 the following capitals are ordered to be cancelled:

3 per cent. cons. L.46,884,600

S per cent. reduced, 47,892,500

L.94,777,100 Interest, L.2,843,313

### Note XXII.—Page 93.

THE terms for the purchase of the land tax, now offered, are the following, in option of the purchaser:

1st. Transfer of stock at one time, or by four instalments in two years.

2d. Payment of money at like periods, the amount being regulated by the current price of stock.

Sd. Transfer of stock in sixteen years, by two instalments each year.

4th. Payment of money at the like periods, and to the like amount.

5th. Land tax on houses may be redeemed at 18 years' purchase, to be paid within three months.

6th. Land tax on lands not exceeding L.10, may be redeemed by a double assessment of land tax for 18 years.

7th. By a double assessment of land tax, until the quantity of stock purchased therewith, and the dividends and interest accruing thereon be sufficient for the redemption of the land tax, giving the proprietor the benefit of accumulation at compound interest. This mode, at the present price of stock, will redeem the land tax in 14 years.

#### NOTE XXIII.-Page 95.

In the official account of the funded debt of Great Britain, 1st February 1812, the amount payable to the commissioners for annuities fallen in by death is L.29,307: but in the ac-

count of the progress made in the redemption of the debt, the sum applicable to the reduction of the debt from the death of nominees to life annuities, prior to 5th July 1802, is stated only at L.21,141; and the same difference occurs in the statements of the former years.

### Note XXIV .- Pages 96 and 105.

The inequality of the funded debt contracted in different years is remarkable. The expense was much greater in some years than others; but the inequality is partly to be accounted for from the loans having sometimes been made near the end of the year, and applied to the service of the following year; and also, from the increase or diminution of the unfunded debt. The debt contracted annually since the renewal of the war in 1803, has been less than in the former war, owing to the large sums raised by war taxes and otherwise, within the year. It is remarkable that the debt redeemed in 1803, before reduction to 3 per cent. is greater than the debt contracted.

The increase of the public debt for Britain, in 1812, may be

thus estimated.		
	Reduce	ed to 3 per cents.
L. Funded in 5 per cents.	L.5,866,236	L.9,777,060
M. Funded in ditto, -	- 7,332,795	12,231,325
N. Funded in 3 per cents.		27,544,000
		L.49,542,385
Increase of unfunded debt,	3,800,637	6,334,395
Redeemed by sinking fund i	n 3 per cents.	20,922,876

Addition to public debt, estimated in 3 per cents. L.34,953,904 and estimated in 5 per cents. - 22,972,342 And the increase in other years may be estimated in the same manner.

### NOTE XXV.-Page 130.

THESE sums (exept the two last) are taken from the return to an order of the house of commons, dated 19th February 1811. They do not comprehend the charges of collection. amounting now to above three millions, nor the money repaid on drawbacks, bounties, and like allowances. They comprehend the rents of crown lands, and some other parts of hereditary revenue, which do not form any part of taxation. They comprehend the balance in the hands of the collectors and receiver-general, and the bills in the hands of the receivergeneral at the commencement of each year; and as the balances and bills outstanding at the end of the year, are not deducted, the sums contained in the table are larger than the amount of the taxes by the amount of these balances, which, on the 5th January 1811, were L.1,877,518; and on the 5th January 1812, L.2,031,826; and on the 5th January 1813, L.2.195,888.

Notwithstanding these inaccuracies, this table exhibits a competent view of the progress of our taxation.

### Note XXVI.—Page 133.

THE high encomiums bestowed upon Mr. Pitt's sinking funds, rendered it necessary to enter into a full discusion of their merits.

"To the consolidated fund the country has looked for the interest of its debt, and for its extinction to the sinking fund. The best eulogium that could be made on the sinking fund, was the plain statement he had made. There could be but one opinion in the house on the subject. It was owing to the institution of the sinking fund that the country was not charged with a much larger amount of debt. It was an advantage gained by nothing, and a system likely to be attended with still greater advantages. Therefore, independent of considerations of good faith, which should induce the house to hold

and cling to a system once adopted, it was pledged to support it, having positive trial and experience of its utility."—
(From lord Henry Petty's speech at opening the budget, 29th
March, 1806, as reported in the newspapers at the time.)

"On the same principle which guided the determination of parliament in 1786, another act was passed in 1792, which provided, that on all future loans, a surplus of one per cent. per annum on the capital, should be raised for the redemption of the capital. This was an idea conceived in the spirit of inflexible integrity and economy, of which nations rarely afford an example, though, like the same virtues in private life, it is calculated to promote, in the highest degree, their prosperity."

—(Examination into the Increase of the Revenue, from 1792 to 1799, by George Rose, Esq.)

Quotations of a like kind might be adduced to a large extent.

### Note XXVII.-Page 140.

In Mr. Rose's Examination into the Increase of the Revenue, &c. 1799, a table is given of the money borrowed, and capital debt contracted since the commencement of the war, in which the loan of 1798 is stated at nine millions, with a corresponding capital, and the columns summed accordingly. He adds, indeed, in a note, that "the loan of 1798 was for 17 millions; but the charge on the consolidated fund was only for nine millions, as the remaining eight millions is to be supplied from the aid and contribution tax, in purchasing stock to the extent of the capital created by that sum."

Did he believe, or did he expect his readers to believe, that this part of the loan, which he endeavours to keep out of view, was less a burden on the public, because it was then proposed to discharge it by a certain tax to be levied on the public;—an arrangement which was soon after relinquished?

### NOTE XXVIII .- Page 147.

In the first part of Table X, which exhibits the progress of taxation and of the sinking fund on Mr. Vansittart's plan, compared with that of the former system, the years marked on the margin are higher by one, than in the outlines, Table A. 1; because the taxes imposed, suppose in 1813, can hardly become effectual before the 1st August of that year, and, therefore, their produce the first year, or from 1st August 1813 to 1st August 1814, ought to be set in opposition to the produce of the sinking fund during the same time.

# Note XXIX.-Page 165.

In order to support the value of the five per cent. stock, it was enacted that it should not be redeemed till 25 millions of the three per cents. were paid off with money applicable to the redemption of the public debt. This restriction is now removed by the condition being fulfilled. The loyalty loan is not redeemable at par till the expiration of three years after the consolidated five per cents. are paid off.

### Note XXX.—Page 168.

The subject of this section is more fully examined now than it was in the former edition, and the result is more favourable to the system of funding in the 3 per cents. Nothing, however, appears sufficient to alter our general judgment on the subject.

# APPENDIX I.

#### § 1. ACCOUNT OF THE STOCKS.

The term Fund properly signifies any sum of money, or annual revenue, appropriated to a particular purpose. Thus, the part of the revenue which is set aside for the payment of the national debt is called the Sinking Fund. But when we speak of the funds, we generally mean those large sums which have been lent to government, and constitute the national debt, and for which the lenders or their assignees receive interest from the public revenue. These persons are said to invest their money in the funds. The term Stock is used nearly in the same sense; and is also applied to the sums which form the capital of the Bank of England, the East India and South Sea Company, and other public companies, the proprietors of which are entitled to a share of their respective profits.

The funds which at present constitute the public debt, or are connected with it, are,

Bank Stock. The Bank of England was incorporated in 1694. Their original stock, raised by subscriptions, not exceeding L.20,000 in one name, was L.1,200,000, which was lent to government at 8 per cent. interest, and L.4000 allowed for management, amounting together to L.100,000. In the year 1709, the bank advanced L.400,000 more to government,

without additional interest, which reduced the interest received by them to 6 per cent. They afterwards advanced various sums to government, by withdrawing exchequer bills or otherwise, until the permanent debt due to them amounted, in 1746, to L.11,686,800, at which it has remained since. The rate of interest has been gradually reduced, and is now 3 per cent. Besides this permanent debt, the bank has been long in the practice of assisting government, by advancing money on exchequer bills, in anticipation of the land and malt taxes, and now of the annual taxes substituted for the former; by payment of bills drawn on the treasury, and otherwise, to a great extent. The stock of the bank has been enlarged, at a rate nearly keeping pace with their advances to government, but not exactly the same: the sum upon which they divide is L.11,642,400.

The first term of the charter of the bank was only to the year 1705, and it has since been extended from time to time, being liable to dissolution at the term specified in each charter, upon twelve months notice, and repayment of the money advanced, by government. It is also provided by the various loan acts, that the bank shall remain an incorporation after the term specified in the charter, for the purpose of transacting the business of these loans, till they be redeemed.

In the year 1800, at which time their charter stood extended to 1802, it was agreed, upon the advance of L.3,000,000 by the bank to government for six years without interest, to prolong their charter till the end of twelve months notice, after 1st August, 1833; and, in 1806, it was agreed to continue this advance till six months after the conclusion of a definite treaty of peace, at 3 per cent. interest.

In 1808, a further advance of L.3,000,000 was agreed to be made by the bank, without interest during the war, in consideration of the large deposits of public money made in their hands, the average of which was estimated to exceed ten millions.

The state of these agreements stands thus:

Interest on L.6,000,000, advanced by	by the	bank		per cent. L.300,000
But government pays only interest	on L.S	,000,		
at 3 per cent	•	•	-	90,000
Balance in favour of government,		-		L.210,000

The bank have also advanced to government L.376,739, and afterwards L.500,000 more, without interest, in consideration of the large sum of unclaimed dividends on the public

funds always : emaining in their hands.

The dividend on the bank stock at its establishment in 1694, was 8 per cent. In 1697 it rose to 9 per cent. but soon afterwards fell, and varied from 6 to 5½, and 5 per cent.; and in 1754 fell so low as 4½ per cent. In 1788 it rose to 7 per cent. and in 1807 to 10 per cent., at which rate it has continued since. The dividends are payable on the 5th April and 10th October.

In the interval between 1788 and 1807, the following bonuses were paid to the proprietors of bank stock, in addition to the dividend, from the surplus profits.

Ladyday, 1799, L.10 0 0 per cent. in the loyalty loan.

Ladyday, 1800, 5 0 0 in the navy 5 per cents. Michaelmas, 1802, 2 10 0 in ditto.

Michaelmas, 1802, 2 10 0 in ditto. Michaelmas, 1804, 5 0 0 in money.

Michaelmas, 1805, 5 0 0 in money.

Michaelmas, 1806, 5 0 0 in money.

In all, - - L.32 10 0

The income of the bank arises from the interest of the permanent debt, and temporary advances to government; the allowance for the management of the public funds; for receiving contributions for loans, and transacting the business of lotteries; from the interest of stock held by the company, the discount of bills of exchange, and some smaller articles.

The South Sea Company was incorported in the year 1711. for the ostensible purpose of trading to the western coast of

America. Their original capital was L.9,177,967, lent to government, for which they received 6 per cent. interest, and L.8000 for management. In 1715 the capital was increased to L.10,000,000, and in 1719 to L.11,746,844, chiefly by adding arrears of interest unpaid to the former capital. In 1720 a scheme was formed for uniting all the public funds into one; and, for that purpose, the company was authorised to purchase the debts and annuities due by government, and enlarge their capital in proportion to the extent of their purchase, and sell this additional stock on the most advantageous terms they could procure. The amount of these debts and annuities, (besides those due to the Bank and East India Company, and not comprehended in the scheme) was,

Redeemable debts, bearing interest at 5 per cent. L.11,779,660

Ditto. bearing interest at 4 per cent. 4.776.822

Ditto,	bearin	ig inte	or cot a	ac x pe	i cci		491109022
Amount of redee	mable	lebts,	-		-		L.16,556,482
Long annuities for Lottery annuities				ears,		•	L.666,821 127,260
Amount of annu	ities,				-	-	L.794,081

This scheme gave rise to an extraordinary scene of national infatuation, generally called the South Sea Bubble. The expectations entertained of advantage to be derived from this agreement with government, and from the extended trade to the South Sea were so extravagant, that the price of their stock rose in a short time to 1000 per cent. and soon after, upon a discovery of the delusion, fell as rapidly, to the ruin of many. The folly of this national credulity is the more surprising, as a similar delusion, of the Mississippi Company, had taken place in France about a year before, attended with consequences still more fatal.

The greater part, however, of the public debt was subscribed into the stock of this company, and their capital was raised to L.37,802,483, of which four millions were purchased by the bank in 1722. The only branches of trade in which the company ever engaged, were that of conveying slaves to the Spa-

nish colonies, and the whale-fishery; and these being attended with loss, were abandoned. Since 1748 they have carried on no trade whatever. Their stock has since undergone various modifications, and has been considerably reduced by payments from government, and the rate of interest has sustained the same reductions as in the other public funds. It is at present distributed into the following branches:—

South Sea Stock, considered as the trading capital of the company, though they have long ceased to trade. This was fixed, in 1733, at L.3,662,784, and has remained invariable since. The dividend received by the proprietors of this stock is 3½ per cent. of which 3 per cent. is paid by government, and the remaining half per cent. by the company. This they are enabled to make from fines to which they are entitled from ships trading within the bounds of their charter, and the allowance received from government for management. This article amounted, in 1786, to about L.15,000, but is since reduced in consequence of the purchase of part of the capital under their management by the commissioners,

Old South Sea Annuities. These were separated from the other funds of the company in 1723, when they amounted to L.16,901,099, bearing interest at 5 per cent., reduced in 1727 to 4 per cent., in 1751 to 3½ per cent. and in 1757 to 3 per cent. Part of the capital being paid off at different times, it was reduced in 1775 to L.11,907,470, at which it remained till Mr. Pitt's sinking fund was established in 1786.

New South Sea Annuities, separated from the other funds of the company in 1733, when they amounted to L.10,988,318, bearing interest at 4 per cent. The capital was reduced in 1775 to L.8,494,830, and the interest has undergone the same reductions as that of the old annuities.

Three per cent. annuities, 1751, are also under the management of the South Sea Company. This fund consisted originally of L.2,100,000, borrowed for the purpose of paying off those holders of South Sea annuities who did not consent to the reduction of interest which took place at that time.

It was reduced in 1775, by payments at various times, to L.1,919,600.

A considerable part of these three last mentioned funds has been redeemed by the commissioners since 1786.

The dividends on the South Sea stock, the new South Sea annuities, and the 3 per cents. 1751, are payable 5th January and 5th July; those on the old South Sea annuities 5th April and 10th October.

Three per cent. reduced annuities. This fund commenced in 1746, and was then formed of various articles of public debt which formerly bore a higher rate of interest, from which circumstance it derived its name. But many additions have been made to it by subsequent loans which never bore interest at any other rate. 'The dividends are payable 5th April and 10th October.

Three per cent. consolidated annuities. This is the largest of all the public funds. It commenced in 1731, but derived its present name from the consolidating act in 1751, being formed by the union of several capitals formerly kept separate. Many additions have since been made to it. The dividends are payable 5th January and 5th July.

Three per cent. annuities, 1726. This fund consists of L.1,000,000 borrowed by lottery in that year, for the discharge of exchequer bills issued for paying the arrears of the civil list. The interest was at first charged on a duty of 6d. per L.1 on pensions, but it is now paid from the consolidated fund; though the fund itself, for reasons which do not appear, is still kept separate. The dividends at the same terms as those of the 3 per cent. cons.

A fund bearing interest at 3½ per cent, was established in 1756, but the sums it was charged with have have been since reduced to 3 per cent, interest, or paid off.

Four per cent. consolidated annuities. This fund commenced in 1760; but L.23,500,000 borrowed on it, in that and the following years, being paid off, or the rate of interest reduced, the earliest article now belonging to it is a loan of L.5,000,000, in 1777, to which various other loans, or parts of

loans, have since been added. The dividends are payable at the same terms as those of the 3 per cent. reduced.

Navy five per cent. consolidated annuities. This stock commenced in 1784, and was first applied for funding the navy, victualling, and transport bills, then in circulation, from which it derived its name. It has since received many additions, chiefly by funding exchequer bills. The dividends are payable at the same terms as those of the 3 per cent. cons.

Loyalty Loan, or five per cent. annuities, 1797 and 1802. An account of this fund is given in Note XII. The dividends are payable at the same terms as those of the 3 per cent. reduced.

Imperial three per cent. annuities. An account of this fund is given, pages 77, 78. The dividends, though due November 1st and May 1st, are not paid till January and July.

Irish five per cent. annuities, are not guaranteed by Britain, but transferrable at the Bank of England, and the dividends payable there on the 25th March and 25th September.

And the terminable annuities are,

Annuities on lives. The amount of these, standing in the books of the exchequer, including tontines, on the 1st February, 1813, was L.65,571; but a considerable part had not been demanded for upwards of three years, and is probably expired. They are payable at the exchequer half yearly, on the 5th January and 5th July, and are transferrable by assignment indorsed on the order, which must be registered at the exchequer. Any person receiving an annuity, knowing the nominee to be dead, forfeits L.500, and treble the sum received. See Note XVII.

Long annuities. These terminate on the 5th January 1860, and are now payable half yearly, at the bank, on the 5th April and 10th October. The amount on the 1st February, 1813, was,

British, - - - L.1,140,601 Irish, - - 104,083

L.1,244,684

Converted life annuities. [See page 73.] The amount of stock converted on the 5th January, 1813, was,

5 per cent. cons.	•	-	-	L.1,303,143
3 per cent. reduced,	-	-	-	596,437
				_
				T + 00+ 700

L.1,961,582

and the subsisting annuities amounted to - L.135,675 payable at the same terms as the dividends of the converted stock.

Imperial annuities, granted along with the last imperial loan for 25 years, and payable at the same terms as the dividends on that loan. They expire in May, 1819, amount L.230,000.

#### § 2. OF THE EAST INDIA COMPANY.

The affairs of the East India Company have been, and still are, so much blended with the public revenue, that some account of their progress and present state belongs to the subject of our inquiry.

This company presents a singular example of a mercantile society commencing on slender funds, and gradually expanding, but not assuming for a century and a half any great political importance; and afterwards acquiring the sovereignty of a mighty empire, exceeding the British Isles in extent and population, perhaps in wealth; still remaining in complete subjection to the parent state, without contributing much, at least not directly, to the public revenue.

The first charter was granted by queen Elizabeth in 1600, and conferred the exclusive privilege of trade to all countries, from the Cape of Good Hope to the Streights of Magellan, for lifteen years. Their original capital was only L.72,000 in shares of L.50 each; and it was not formed into a joint stock.

for some years after, and for a long time their exertions were feeble. In the reign of James I, they received a new charter, and their stock was enlarged. The company was dissolved during the usurpation of Cromwell in 1755, and the trade laid open to the public; but this being attended with inconveniences, it was re-established about three years after, at which time their nominal stock was L.739,782, whereof only one half, or L.369,891 was paid up, and was properly their trading capital. In the subsequent period, the renewals of their charter were frequent, there being no fewer than six between the restoration and the revolution, and three between the revolution and 1698. These charters conferred sovereign power. The company had been invested with criminal jurisdiction by the charter of James I. They were now authorised to possess all plantations, forts, and factories, in the East Indies, and erect new fortifications there, and at St. Helena, and to make war or peace with any prince or people that were not Christians. The other charters were chiefly granted for enlarging their powers to suppress interlopers. In 1693, a tax of 5 per cent. was imposed on their stock, which at that time amounted to L.744,000, and their charter was forfeited for non-payment, but was immediately restored. These charters were not limited in point of time, but reserved a power of dissolving the company upon three years' intimation, if its privileges should be found prejudicial to the public.

A new East India Company was established by king William in 1698, which advanced L.2,000,000 to government, at 8 per cent. interest. Their right of trade was to continue till 1714, after which they might be dissolved upon three years' notice, and repayment of the money due by the public; and a similar clause was inserted in all the subsequent charters. In 1702, the two companies were united, and, in 1708, the united company lent a further sum of L.1,200,000 to government without interest, which reduced the rate of interest to 5 per cent. upon which their charter was prolonged to 1729. In 1712, it was further prolonged to 1736, and again in 1730 to 1769, on which occasion the company gave L.200,000 to the public revenue, and agreed to the reduction of the rate of in-

terest on their debt to 4 per cent. The next prolongation of their charter took place in 1743, when they advanced L.1,000,000 to government at 3 per cent. interest, and obtained an extension to 1783. When a general reduction of the interest on the public debt took place in 1749, the interest of the whole debt of L.4,200,000 due to the company was reduced to 3 per cent, and they were empowered to borrow by the sale of annuities to that extent, and did borrow L.2.992.440 accordingly. The debt due them by the public remained in this state as a separate fund till 1793, when it was joined to the 3 per cent. reduced stock. The annuitants on the company agreed to accept of 3 per cent. reduced stock in exchange for their annuities, and the company themselves became holders in that stock, to the extent of L.1,207,560, being the residue of the debt of L.4,200,000. This is the only debt now due by the public to the company.

The dividends of this company, arising from the profits of trade, have been variable, and the value of their stock exposed to greater fluctuation than that of any other of the other public funds. Previous to 1757, although invested in some measure with sovereign power, their possessions in India were limited to forts and factories, with a small contiguous territory: but soon after that time, in consequence of the conquests made by lord Clive and others, they acquired extensive dominions, which they held at first by dependent nabobs, whom they raised and removed at pleasure, but afterwards assumed into their immediate possession. From these dominions they drew an ample revenue, which soon attracted the attention of government, as an object in which the public had a right to participate. An agreement was made in 1767, that the company should pay L.400,000 annually for two years, and in 1769 it was extended for five years more, as a consideration for being permitted to retain the revenue of their acquired territory. The company, however, have been so often engaged in expensive wars with the native powers, that the prospect of deriving a revenue to Britain from their possessions was never realized for any length of time. In 1773, they were not only unable to make the stipulated annual payment, but were obliged to apply to government for a loan, and received one of L.1,400,000, their dividends being limited to 6 per cent. till it should be repaid. This debt was paid up in 1777, and the restriction on their dividends of course removed.

In 1781, a new agreement was made with the company. A payment of L.400,000 made that year was accepted of, in discharge of all former claims; their exclusive privileges were extended to 1794; and, their dividends being at that time 8 per cent. it was stipulated that three-fourths of their surplus profits should be appropriated to the public service, and the other fourth retained by the company for the enlargement of their dividends: which, however, were not to be increased above one per cent. in any year, and never to exceed 121 per cent. The public never derived any revenue from this agreement; for, in the following years, the nett profits of the company did not amount to 8 per cent., and their affairs fell under such embarrassment, that government was induced to postnone the payment of customs due by them, and also to issue exchequer bills to the amount of L.300,000, upon which the bank advanced money for their relief.

By an act passed in 1784, the board of commissioners for the affairs of India, generally called the board of control, was established, to whose orders the directors of the East India Company are subject in all matters of civil and military government, and who have also the power of regulating the administration of their territorial revenue; and "whereas schemes of conquest and extension of dominion in India are measures repugnant to the wish, the honour, and the interest of this nation," the governor-general was prohibited from commencing hostilities, or entering into any treaty for making war against any of the princes of the country, unless hostilities have been committed, or preparations made for hostilities against them or their allies. The history of the succeeding thirty years will show how far the conduct of Britain to the native powers of India has been conformable to this excellent principle.

At the next renewal of their charter, in 1793, the exclusive

privileges of the company underwent some restrictions. Every British subject was permitted to export any goods, except military stores and copper, to India, but not to China; and the civil servants of the company, and merchants residing in India under their protection, were permitted to import any goods, except piece goods of cotton and silk, on board the company's ships to London; and for these exports and imports in private trade, the company was obliged to appropriate 3000 tons of shipping, at L.5 per ton outwards, and L.15 inwards, of freight, in time of peace, with an addition in time of war. Under these limitations, their exclusive privileges were extended to 1st April, 1814. The full extent abovementioned of tonnage for private trade outwards has never been required.

The clear profits of the company were directed to be applied as follows: 1st, in payment of 10 per cent. dividend on their stock, besides one half per cent. more, eventually, from a separate fund; 2d, in payment of L.500,000 annually of bills drawn from India for the liquidation of the debt due by the company in that country; 3d, in payment of L.500,000 annually to the exchequer for the public service. The surplus after these payments to be applied to the further discharge of the debts in India, till it should be reduced to two crores\* of rupees; and of the bonded debt in England, till it should be reduced to L.1,500,000; after which one-sixth of the surplus profits was to be applied to the augmentation of the dividends, and the remaining five-sixths to be paid into the bank of England, to be placed to the account of the commissioners for the reduction of the national debt, till it should amount to 12 millions, (which sum was to be a guarantee fund for securing the stock and dividends of the company;) and when that fund was completed, the foresaid five-sixths of surplus profits was to be paid into the exchequer as the property of the public. The above-mentioned payment of L.500,000 to the exchequer, has not been made since April, 1794. It is unnecessary to add, that the guarantee fund has never been made up; and,

<sup>\*</sup> A Crore of rupees is nearly equal to a million sterling.

consequently, that the public have never participated in any surplus profits. In 1812, the embarrassed state of the company's affairs obliged them to apply again to government for aid; and, accordingly, a loan of L.2,500,000 was granted to them, joined to the loan of that year.\* The sum funded for this was L.4,400,000 in the 3 per cents.; and the company was bound to pay into the bank of England, besides the interest and charges of management, L.110,820 as a sinking fund for the discharge of the principal, being about 23 per cent. on the funded capital.

The charter being now [1813] on the eve of expiring, the object, so long contended for, of laving the trade to India open to the public, is at last, in a great measure obtained. Permission is granted to every British subject to trade to India, but not to China, both in export and import, after 10th April, 1814. This trade, however, is subjected to various regulations, the most important of which are:- That no vessel shall proceed on private trade, to India, without a licence from the directors, which shall be granted, on application, of course, to the principal settlements of Fort-William, Fort-George, Bombay, or Prince of Wales' Island; but no vessel may fit out to other places, unless specially authorized; and in case the directors refuse to grant such special licence, the board of control shall ultimately determine in regard to the same: that no vessel under 150 tons shall be employed: that goods imported in private trade shall be brought to some port in the united kingdom which shall have been declared fit for that purpose by order in council: that the importation of articles of silk and cotton manufacture, for home consumption, shall be confined to the port of London, and the goods deposited in the company's warehouses there: and the importation of tea, in private trade, is prohibited without licence from the company.

The company retain, till 10th April, 1834, the government and revenue of their territorial acquisitions, subject to the regulation of the board of control, and the exclusive trade to China, and may trade as a corporation to India, in common with his majesty's other subjects.

The same hopes of procuring a revenue to the public, which have so often before proved delusive, are still held forth. The enactments for the distribution of their territorial and commercial revenue are nearly the same as at the renewal of their charter in 1793. Their commercial profits are to be employed, 1st, in payment of bills of exchange; 2d, in paying debts, (the principal of the bond debt in England excepted.) and commercial charges: 3d, in payment of a dividend of 104 per cent. on their capital: 4th, in the reduction of their bond debt. No annual payment to government, except the interest and sinking fund of the loan of 1812, is required. The territorial revenue in India is applicable for the civil and military charges in that country, the payment of the interest, and liquidation of the Indian debt, and of the bond debt at home; and when the Indian debt is reduced to 10 millions, and the bond debt to 3 millions, then the surplus revenue, both territorial and commercial, shall be paid into the exchequer, and applied, in the first place, for raising a guarantee fund of twelve millions; and when that fund is completed, one-sixth of the surplus shall belong to the company, and the other five-sixths become the property of the public.

The progress and present state of the stock of the company is as follows:—

	Capital.		Sums advanced.
1708,	L.3,200,000	at 87½ per cent.	L.2,800,000
1786,	800,000	at 155 per cent.	1,240,000
1789,	1,000,000	at 174 per cent.	1,740,000
1793,	1,000,000	at 200 per cent.	2,000,000
	L.6.000.000		L.7.780,000

In 1797, an act was passed authorising the company to augment their capital by L.2,000,000; but this has not yet been carried into execution.

The dividends on India stock have been as follows:-

Ladyday,	1709,	5	per cent.
Michaelmas,	1709,	8	per cent.
Michaelmas,	1711,	9	per cent.
Christmas.	1716.	10	per cent.

Midsummer,	1722,	8 per cent.
Christmas,	1732,	6 per cent.
Midsummer,	1733,	7 per cent.
Christmas,	1755,	8 per cent.
Christmas,	1766,	6 per cent.
Midsummer,	1767,	10 per cent.
Midsummer,	1769,	11 per cent.
Midsummer,	1770,	12 per cent.
Midsummer,	1771,	12½ per cent.
Christmas,	1772,	6 per cent.
Christmas,	1776,	7 per cent.
Midsummer,	1778,	8 per cent.
Midsummer,	1798,	10½ per cent.

And they have continued at that rate since.

India Bonds. The company owes a large sum on transferrable bonds, generally of L.100 each, the rate of interest on which has frequently varied, and is at present 5 per cent. payable twice a year, on the 31st March and 30th September. clear of property tax, which is paid by the company. Government have several times interfered to restrict the amount of this debt. In 1773, their dividend was limited to 7 per cent. till their bond debt was reduced to L.1,500,000; and this was effected in 1778. Being afterwards enlarged to L.3,200,000. they were again required to restrict it to L.1,500,000, as a condition of the increase of their capital; but this reduction was not completed, and this debt has been enlarged since, with consent of the board of control, occasioned partly by the transference of part of the debt due by the company in India, to Britain. These bonds are received by the company as cash, when there is six months interest due on them, and are a very marketable security, generally bearing a premium, being very convenient to be kept by merchants or public companies to answer exigencies. When transferred, the interest to the day of sale, together with the premium, is added to the sum of the bond, and paid by the purchaser.

#### § 3. MANNER OF TRANSACTING LOANS.

In the early part of the funding system, the subscription for loans was taken at the exchequer; but, since 1714, they have been transacted at the Bank of England; and this was formerly done by open subscription. Terms were proposed to the public, and as these were calculated to afford a profit, the subscription was generally filled up in a short time. If the terms were not judged sufficient, and consequently the subscription not filled up, others more advantageous were offered afterwards.

For a considerable number of years, a mode of transacting loans still more favourable to the public has been adopted. The chancellor of the exchequer fixes upon the funds in which the loan is to be made. These are often of different kinds. and not unfrequently a long annuity forms part of the emolument. He then gives public intimation that he is ready, on a certain day, to receive offers, and assign the loan to those who are willing to accept of the lowest terms. If a long anruity be a part of the proposed emolument, the other funds to be assigned to the lenders are fixed at a rate somewhat lower than the estimated value for each L.100 borrowed, and the bidding is on the long annuity, the loan being granted to those who will accept of the least annuity in addition to the capital offered. If the loan be in different funds, but without an annuity, the capitals in all the funds except one are previously fixed; and the bidding is on that fund, the loan being granted to those who will accept of the least capital. The chancellor of the exchequer is generally attended, at the time appointed, by several of the principal bankers in London, who deliver their offers, having previously made up a list of persons who are willing to share with them to a certain extent, in case their offer be accepted; and the loan is assigned to the offerer who proposes the lowest terms. This method, since its adoption, has been conducted with the utmost impartiality, and. being a fair and open competition for the public benefit, has been uniformly ratified by parliament. The only deviation from it, since its first adoption till the present year, was in the loan of 1796, called the Loyalty Loan, when the method of open subscription at the bank was resorted to. In the loan of November 1813, a preference was given to the contractors of the former loan.

The loans are always payable by instalments at different periods of the year: but the dividends are payable on the whole from the first usual term of the funds in which the loan Thus the lender receives dividends during the whole of the first year, although he only advances the money on the days appointed for payment of the instalments; or if he advances the whole at first, he is allowed a suitable discount, and he derives part of his profit from these allowances; and, according to the terms of the loan, he is generally possessed of several interests; so much perhaps in a 3 per cent. fund, so much in a 5 per cent. fund, so much in a long annuity, and formerly so much in lottery tickets. After the loan is completed, these interests are assignable separately; but when the loan is in progress, they may be either assigned separately or together. The separate parts in this stage of the business are called scrip, and their united amount is called omnium. order to obtain a loan it is necessary that the value of omnium at the time should be above par. This difference, which often amounts to 5 per cent. or upwards, is called the bonus to the lenders. Instances, however, have occurred, in which the price of omnium fell below par, before the loan was completed. Lenders who do not pay their instalments at the appointed terms forfeit their subscriptions. The Bank of England not unfrequently lends its aid in advancing some of the instalments.

The terms of the loan of 27 millions, contracted in June, 1813, were,

L.110 in 3 per cent. reduced scrip, valued at 57\(\frac{3}{2}\), L.63 10 6 60 in 3 per cent. cons. scrip, valued at 56\(\frac{1}{2}\), 33 15 0 Long annuity scrip, of 8s. 6d. for 46\(\frac{3}{2}\) years, at

14 years' purchase, - - - 5 19 0

Value of omnium, - - - L.103 4 6

payment,		-		-	-		3	4	6
And the loan was payal	ble by	the f	follo	wing	inst	alm	ents:		
Deposit at subscr	iption,					1	.10	0	0
July 23d, -	- 1	-		- 71	-		10	0	0
August 20th,		-				-	15	0	0
September 17th,					-		10	0	0
October 22d,		-		-			15	0	0
November 19th,	-		-		-		10	0	0
December 17th,		-		-			10	0	0
1814. January 21st,				-		-	10	0	0
February 18th,					-		10	0	0
						_			
						L.	100	0	0

Upon payment of the first instalment, a separate sheet is delivered to the original holder for the sums paid on each component part of the loan, containing, on one side, a receipt for the sum paid, and on the other, a form of assignment. When a sale takes place, the original holder puts his name to the assignment, without filling it up, and delivers it thus blank indorsed to the purchaser; and, in this manner, scrip and omnium pass from hand to hand like bank notes. These receipts are so made out, before delivery from the bank, as to show how much money must be paid upon the several scrips, at each instalment. Thus, in the above-mentioned loan there was paid for each L.1000 subscribed at the first instalment,

L.60 on the 3 per cent. reduced.

34 on the 3 per cent. cons.

6 on the long annuities.

L.100 being 10 per cent. on the loan; and like sums were payable at the instalments in July, September, November, and December, 1813; and in January and February 1814; and one-half more, or 15 per cent. on the instalments in August and October, 1813. The holders of scrip must attend to the payment of these instalments at the bank on the appointed days, under pain of forfeiture; and when the last instalment is paid at its term, or the whole paid up at an earlier time,

with allowance of discount, the scrip is converted into stock, and consolidated with the mass of the stock of the same name previously existing, from which it cannot afterwards be distinguished.

The value of scrip, after any given number of payments have been made thereon, is computed by deducting the amount of the remaining payments from the value of the stock, at the market price.

#### § 4. MANNER OF TRANSFERRING STOCK.

Agreements for the sale of stock are generally made at the Stock Exchange, which is frequented by a set of middlemen called Jobbers, whose business is to accommodate buyers and sellers with the exact sums they want.\* A Jobber must be possessed of considerable property in the funds; and he declares a price, suppose 591 or 595 in the three per cent. cons.: that is, he is willing to buy any sum from any person at 59%, or sell him at 595. By this means, one who wishes to sell. suppose L.375. 10s. and could hardly find a purchaser for that precise sum without the assistance of a Jobber, obtains his purpose, and the smallest sums are purchased and sold with the utmost facility. The Jobber's profit is generally per cent. for which he transacts both a sale and a purchase; and these persons often engage in no other stock speculation, but go away when the business of the day is over, possessed of the exact sum of stock they had in the morning.

The bargain, being agreed on, is carried into execution at the transfer office, at the bank, or the South Sea house. For this purpose the seller makes out a note in writing, which contains the name and designation of the seller and purchaser,

<sup>\*</sup>This is the proper acceptation of the term Jobber, in the language of the Stock Exchange. In common conversation, we generally understand by it, a speculator in the stocks.

and the sum and description of the stock to be transferred. He delivers this to the proper clerk,\* and then fills up a receipt, a printed form of which, with blanks, is obtained at the office. The clerk, in the meantime, examines the seller's account, and if he find him possessed of the stock proposed to be sold, he makes out the transfer. This is signed in the book by the seller, who delivers the receipt to the clerk; and upon the purchasers's signing his acceptance in the book, the clerk signs the receipt as witness. It is then delivered to the purchaser upon payment of the money, and thus the business is completed.

This business is generally transacted by brokers, who derive their authority from their employers by powers of attorney. Forms of these are obtained at the respective offices. Some authorise the broker to sell, others to accept a purchase, and others to receive the dividends. Some comprehend all these objects, and the two last are generally united. Powers of attorney, authorising to sell, must be deposited in the proper office for examination one day before selling. A stockholder acting personally, after granting a letter of attorney, revokes

it by implication.+

The person in whose name the stock is invested when the books are shut, previous to the payment of the dividends, receives the dividend for the half year preceding; and, therefore, a purchaser, during the currency of the half year, has the benefit of the interest on the stock he buys, from the last term of payment to the day of transfer. The price of stock, therefore, rises gradually, cæteris paribus, from term to term; and when the dividend is paid, it undergoes a fall equal thereto. Thus the 3 per cent. cons. should be higher than the

<sup>\*</sup> The letters of the alphabet are placed round the room, and the seller must apply to the clerk who has his station under the initial letter of his name. In the 3 per cent. cons. office, there are also supervising clerks, who join in witnessing the transfer.

<sup>†</sup> The rate of brokerage is 2s. 6d. per L.100 for buying or selling. A letter of attorney costs L.1. 1s. 6d. The registration of a will, 2s. 6d. The transfer of bank stock under L.25, costs 9s., above it, 12s.; of South Sea stock under L.100. 10s., above it, 12s.; of India stock, L.1. 4s. Government stock is transferred without any charge.

3 per cent. reduced, by 3 per cent. from 5th April to 5th July, and from 10th October to 5th January; and should be as much lower from 5th January to 5th March, and from 5th July to 10th October; and this is nearly the case. Accidental circumstances may occasion a slight deviation.

The dividends on the different stocks being payable at different terms, it is in the power of the stockholders to invest their property in such a manner as to draw their income

quarterly.

The business of speculating in the stock is founded on the variation of the price of stock, which it probably tends, in some measure, to support. It consists in buying or selling stock, according to the views entertained by those who engage in this business of the probability of the value rising or

falling.

This business is partly conducted by persons who have property in the funds: but a practice also prevails among those who have no such property, of contracting for the sale of stock, on a future day, at a price now agreed on. For example, A. may agree to sell B, L.10,000 of three per cent. stock, to be transferred in twenty days, for L.6,000. A has in fact no such stock; but, if the price on the day appointed for the transfer, be only 58, he may purchase as much as will enable him to fulfil his bargain for L.5,800, and thus gain L.200 by the transaction. On the other hand, if the price of that stock should rise to 62, he will lose L.206. The business is generally settled without any actual purchase of stock, or transfer, by A, paying to B, or receiving from him, the difference between the price of stock on the day of settlement, and the price agreed on.

This practice, which amounts to nothing else than a wager concerning the price of stock, is not sanctioned by law; yet it is carried on to a great extent: and as neither party can be compelled by law to implement these bargains, their sense of honour, and the disgrace attending a breach of contract, are the principles by which the business is supported. In the language of the Stock Exchange, the buyer is called a Bull, and the seller a Bear, and the person who refuses to pay his loss is called a Lame Duck; and the names of these de-

faulters is exhibited in the hall of the Stock Exchange, where they dare not appear afterwards.

The most usual times for which bargains of this sort are made, are the first transfer days in February, May, August, and November, These are called rescontre, or settling days. Sometimes, instead of paying the difference on the rescontre day, the settlement is deferred to a future day on such terms as the parties agree on. This is called a continuation.

All the business, however, which is done in the stocks for time, is not of a gambling nature. In a place of so extensive commerce as London, opulent merchants who possess property in the funds, and are unwilling to part with it, have frequently occasion to raise money for a short time. Their resource, in this case, is to sell for money, and to buy for a future time; and although the money raised in this manner costs more than the legal interest, it affords an important accommodation.

The following statement has been given of the highest and lowest prices of the stocks, since 1720.

#### HIGHEST PRICES.

3 per cents.	June	1739,	L.107
4 per cents.	August	1791,	107%
5 per cents.	Ditto		1223
Bank stock,	February	1792,	219
South Sea stock,	May	1768,	111
India stock,	December	1768,	2763

#### LOWEST PRICES.

S per cent. cons.	January	1798,	L.473
S per cent. reduced,	June	1797,	47
4 per cents.	January	1798,	59½
5 per cent. navy,	January	1798,	693
Bank stock,	January	1782,	91
South Sea stock,	February	1782,	62
India stock,	January	1784,	1185

#### APPENDIX II.\*

#### TABLE I.

Amount of the different Funds on the 1st January, 1793, and 1st February, 1813, with the sums redeemed, and balances unredeemed; including the debts for Ireland, Germany, and Portugal, guaranteed by Britain.

	Debt, Jan.5,	Debt, 1st February, 1813.	
2 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1		Contracted Redeem'd. Unredeem	ı'd
3 per cent. South Sea stock, -	3,662,784		34
3 per cent. old South Sea annuities,			
3 per cent. new South Sea annuities,	8,494,830		- 1
_	24,065,084		00
3 per cent. annuities, 1751,	1,919,600	1,919,600	1
Amount transferrable at the South			
Sea house,	25,984,684		1
Bank of England,		11,686,800 11,686,80	
3 per cent. annuities, 1726,	1,000,000		
3 per cent. cons. { British, # -	107,399,696	404,730,558 91,835,854 312,894,70	
J,			
) British,§	41,540,073	205,928,521 127,168,488 78,760,03	
3 per cent. reduced, Sirish, -		30,068,750 5,505,278 24,563,47	
S Portuguese,		895,522 176,674 718,84	
3 per cent. Imperial loans, -		7,502,633 1,361,974 6,140,65	
Amount 3 per cents		721,032,593,241,055,489,479,977,10	14.
Redeemed before 1793, -	10,242,100		
	177,369,155		-
4 per cent. cons. ? British,	32,750,000	68,857,321 7,796,400 61,060,92	21
4 per cent. cons. Irish, -		5,054,375 5,054,37	
5 noncont name ? British,	17,869,993	92,202,254 142,000 92,060,25	54
5 per cent. navy, Sirish,		572,000 572,00	
5 per cent. loyalty loan,		1,622,994 1,622,99	94
	227,989,148	889,341,537 248,993,899 640,347,64	18

\* In the following tables, and also in the foregoing statements, the figure marked in the unit place of the sum of a column is often different from what it will be found on trial, owing to the omission of the shillings and pence.

† The capitals transferred for the purchase of land tax, and those converted into life annuities, as well as those purchased by the commissioners, are included in the statement of the redeemed debt here given.

\$L.1,400,000 funded in the 3 per cent. cons. for a loan to the East India Company, in 1812, is not included.

§L.3,000,000 funded in the 3 per cent. reduced, for the East India Company, as above, is not included.

TABLE II. Progress of the Funded Debt of Britain from 1793 to 1813,

		Sums	CAPITAL FUNDER		ED.
		raised.	3 per cent.	4 per cent.	5 percent
Preceding 1793,		unknown.	187,611,255	32 750 000	17,869,993
1793 Loan	A	4,500,000		02,7 50,000	17,009,993
1794 Loan	B	11,000,000			
Navy Bills	C			2,730,000	1,000 -000
1795 Loan		1,907,451			1,926,526
	D	18,000,000		6,000,000	
Navy Bills	E	1,490,647			1,600,898
Loan	F	18,000,000	26,095,800		
1796 Loan	G	7,500,000	10,793,825	-	
Navy Bills	H	4,226,727			4,414,074
Navy and Exch. Bills	1	13,029,399	18,437,874	869,860	2,305,092
LOYALTY LOAN .	K	18,000,000			20,124,843
1797 Loan	L	13,000,000		2,600,000	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,
1798 Loan	M	15,000,000			
Loan	N	3,000,000			
1799 Loan	o	12,500,000			
1800 Loan	P	18,500,000			
1801 Loan	Q	25,500,000			
				1 1 7 7 00 7	2 22 242
1802 Exchequer Bills -	R	8,910,450		4,455,225	2,227,612
Loan	S	23,000,000			
		217,064,674	467,105,854	49,425,085	50,478,039
1803 Loan	Т	10,000,000	16,000,000		
1804 Loan	U	10,000,000			
1805 Loan	v	20,000,000	34,400,000		
	۲,	257,064,674		49,425,085	E0 470 030
O				49,425,065	
Operations LOYALTY LOAN*		-1,762,394	+7,426,233		-4,045,502
		255,302,280		49,425,085	46,432,537
1806 Loan	X	18,000,000			
1807 Loan	Y	12,200,006	17,080,000		1,293,200
1808 Loan	A	8,000,000		9,454,000	
Exchequer Bills -	B	4,000,000		237,900	
Interest deferred 1802,	"	2,000,000		201,500	1,001,001
1809 Loan	c	11,000,000	6,064,478	6,960,000	
Exchequer Bills -					
1810 Exchequer Bills -	D			380,336	
	E	8,311,000			8,581,108
Loan	F				
1811 Exchequer Bills -	H	7,018,700			7,278,392
Loan	I	4,981,300			5,166,319
Loan	K	12,000,000		2,400,000	
1812 Exchequer Bills -	L	5,431,700			5,866,239
Loan	11				7,332,795
Loan	N		27,544,000		,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,
	1		649,330,565		(W) 1025 940
m 1			049,550,505	00,037,321	93,825,249
Reduction management					
Expired annuities‡ -					-
Converted into life annuities			-1,961,582		
			647,368,983	68 957 291	93,825,249
Debts contracted since 1793,			077,300,303	00,001,021	50,020,245
By loans				20 404 555	00 071 677
			438,826,211	30,164,000	
By funding bills,			22,893,099	5,943,321	46,083,600
100000		384,616,705	461,719,310	36,107,321	75,955,255
Contracted before 1793 -			187,611,255		
			649,330,565		
March 200					1
* See Note XII.	+	See Note X	VIII. ± S	ee Note XV	II.

With the Annual Charge on the same.

1.00000	ANNUAL CHARGE ON EACH LOAN. 1Whole and										
1	Total.					Whole an-					
		Interest.	Annuities.	Management.	Total.	nual charge.					
	238,231,248	7,831,837	1,293,870	116,127	9,241,834	9,241,834					
A	6,250,000	187,500		2,812	190,312						
В	13,750,000	440,000	62,792	6,894		9,941,832					
C	1,926,526	96,326		867		10,039,025					
D	24,000,000	780,000	85,500	11,762		10,916,928					
E	1,609,898	80,495		724		10,997,506					
F	26,095,800	782,874	58,500	12,401		11,851,281					
G	10,793,825	323,815	20,582	5,089		12,200,767					
H	4,414,074	220,703		1,986	222,689	12,423,456					
I	21,612,826	703,185		9,726	712,911	13,136,397					
K	20,124,843	1,006,243		9,056		14,051,666					
L	25,350,000	786,500	39,000	11,864	837,364	14,989,030					
M	30,000,000	900,000	36,875	13,915	950,790	15,939,820					
N	5,624,250	168,727		2,530	666,000	16,111,077					
0	21,875,000	656,250		9,843	000,093	16,777,170					
P	29,045,000	871,350		13,070	884,420	17,661,590					
Q	44,816,250	1,344,488	7706	20,167	1,304,033	19,026,245					
R	11,138,063	423,247	7,796	5,099	430,142	19,462,387					
S	30,351,375	862,500		12,937		20,337,825					
	567,008,978		1,604,915	266,870	20,337,825						
T	16,000,000	480,000	32,083	5,713	517,796	20,855,621					
U	18,200,000	546,000		6,188	552,188	21,407,809					
V	34,400,000	1,032,000		11,696		22,451,505					
	635,608,978		1,636,998	290,467	22,451,505						
	+3,380,731	+ 20,513		+1,682		22,473,700					
	638,989,709	20,544,55م	1,636,998	292,149	22,473,700						
X	29,880,000	896,400		10,159	906,559	23,380,259					
Y	18,373,200	577,060		6,247		23,963,566					
A	9,454,000	378,160		3,214		24,344,940					
B	4,239,254	209,584		1,441		24,511,965					
10	12004 470	48,041			48,041	24,604,006					
C	13,024,478		51,233	4,864	516,451	25,120,437					
D	8,253,644	408,879		2,806		25,532,122					
E	8,581,108	429,055		2,917		25,964,094					
F	11,230,000			3,818		26,304,712					
111	7,278,392	363,919		2,385	300,304	26,671,116					
I K	5,166,319 16,800,000	258,316	41 500	1,550	259,800	26,931,982					
L	5,866,236		41,500	5,392	374,894	27,506,874					
M				1,760		27,800,946					
N	27,544,000	366,639 826,320		2,200 8,263		28,169,775 29,004,368					
1	812,013,135	020,320	1 700 711								
	012,013,133	26,925,472	1,729,731	349,165	29,004,368						
			500 557	-134,344	134,344	28,870,024					
			<u>- 523,557</u>			28,346,467					
	1 061 500	59 947	1,206,174	214,821	28,346,457						
	-1,961,582		+ 135,673	<del>-</del> 667		28,422,626					
	810,051,553	20,800,025	1,341,847	214,154	28,422,626						
				i							
	498,861,867		428,065 7 7,796 \$	125,296	19,654,792						
	74,920,020										
1	573,781,887		435,861	125,296	19,654,792						
1	238,231,248		770,313	89,525	8,961,675						
1	812,013,135	26,925,472	1,206,174	214,821	28,346,467	7					

#### APPENDIX II.

#### TABLE III.

Progress and Redemption of the Funded Debt of Great Britain,

Preced		Capital funded each year.	Capital redeemed each year.	Balance each year.	Total funded.	Total redeemed.	Debt un- redeemed.
1791		238,231,248	6,772,350	231,458,898	238,231,248	6,772,350	231,458,898
1791-2		1		227,989,148	238,231,248		227,989,148
1793	A,	6,250,000			244,481,248		232,064,743
1794	B, Ć,	15,676,526		12,871,581	260,157,774		244,936,323
1795	D, E,	25,609,898			285,782,672		267,457,767
1796	F, G, H,	41,303,699		36,913,029	327,071,371		304,375,796
1797	I, K, L,	67,087,669	6,695,585	60,392,084	394,159,040	29,391,160	364,797,880
1798	M,	30,000,000	7,779,807	22,220,193	424,159,040	37,170,976	386,889,073
1799	N, O,	27,499,250	7,151,984	20,347,266	451,658,290	44,322,951	407,355,339
1800	Ρ,	29,045,000	7,247,560		480,703,290		429,132,799
1801	Q,	44,816,250			525,519,540		465,920,636
1802	R, S,	41,489,438	7,667,011	33,822,427	567,008,978	67,255,915	499,753,063
		567,008,978		499,753,063			
1803	Т,	16,000,000		5,557,448	583,008,978	77,698,915	505,310,511
1804	U,	18,200,000			601,208,978	89,003,759	512,205,219
1805	V,	34,400,000	12,142,043	22,257,957	63 <i>5</i> ,608 <b>,</b> 978	101,145,802	534,463,176
		635,608,978	101,145,802				
	L. Loan,	3,380,731		3,380,731	638,989,709	101,145,802	537,843,907
		638,989,709					
1806	х,	29,880,000				113,860,517	
1807	Υ,_	18,373,200	14,076,585			127,937,102	
1808	A, B,	13,693,254	13,871,014			141,808,116	
1809	C, D,	21,278,122	14,234,820			156,042,936	
1810	E, F,	19,811,108	15,512,087			171,555,023	
1811	H, J, K,	29,244,711	17,983,457			189,538,480	
1812	L, M, N,	40,743,031	20,922,876	19,820,155	812,013,135	210,461,356	601,551,779
		212 212 121			i		1
		812,013,135		601,551,779			
Transfer		e annuities,	1,961,582			212,422,938	599,590,197
	for land	ax	24,378,804		=	236,801,742	575,211,393
			236,801,742				

#### And Balances unredeemed.

	REDUCED TO THREE PER CENTS.						
	Capital funded each year.	Capital redeemed each year.	Balance each year.	Total funded.	Total redeemed.	Debt un- redeemed.	
	261,061,243	6,772,350	254,288,893	261,061,243	6,772,350	254,288,893	
		3,469,750	250,819,143	261,061,243	10,242,100	250,719,143	
A,	6,250,000	2,174,405	4,075,595	267,311,243	12,416,505	254,894,738	
B, C,	17,877,543			285,188,786		269,967,336	
D, E,	28,683,163			313,871,949		295,398,044	
F, G, H,	44,246,415			358,718,364		335,253,789	
I, K, L,	83,197,579			441,315,943		411,755,783	
M,	30,000,000			471,315,943		433,975,976	
N, O,	27,499,250			498,815,193		454,323,242	
Р,	29,045,000		21,797,440	527,860,193		476,120,682	
Q,	44,816,250		36,369,524	572,676,443		512,690,206	
R, S,	44,459,587	8,142,144	30,317,443	<b>617,1</b> 36,030	08,128,381	549,007,649	
	617,136,030	68,128,381	549,007,649				
Т,	16,000,000	10,442,552		633,136,030	78.570.933	554,565,097	
U,	18,200,000	11,399,958				561,365,139	
V,	34,400,000		22,257,957	685,736,030	102,112,934	583,623,096	
						1 1	
į	68 <b>5,</b> 736,030	102,112,934	583,623,096				
	683,730		683,730	686,419,760	102,112,934	584,306,826	
	686,419,760						
X,	29,880,000	12,714,715		716,299,760			
Υ,	19,235,333	14,076,585		735,535,093			
A, B,	19,591,456	14,430,447	5,161,009	755,126,549	143,334,681	611,791,868	
C, D,	28,973,773	15,012,820		784,100,322			
E, F,	25,531,846	15,900,987		809,632,168			
H, I, K,	38,341,185	17,983,457		847,973,353			
L, M, N,	49,542,385	20,922,876	28,019,309	897,515,738	213,134,821	034,300,917	
	897,515,738	213 154 821	684 360 917	1.1			
	55,,510,,00	1,961,582	001,000,011		215,116,403	682 399 335	
		24,378,804			239,495,207		
		239,495,207			300,207	000,020,001	
		203,433,207		,		1	

TABLE IV.

Loans for Ireland, guaranteed by Britain, with the annual Charges;

Preced.		Sums raised.	3 per cent.	4 per ct.	5 per cent.	Total each year.	Amount tunded debt
1797	K	1,500,000	2,625,000	300,000		2,925,000	2,925,000
1798	M	2,000,000				4,000,000	
1799	0	3,000,000	5,250,000			5,250,000	
1800	P	2,000,000	3,140,000			3,140,000	
1801	R	2,500,000	4,393,750			4,393,750	19,708,750
1802	S	2,000,000	2,639,250			2,639,250	22,348,000
							1 1
		13,000,000	22,048,000			22,348,000	
1803	Т	2,000,000	3,200,000			3,200,000	25,548,000
1804	U	4,500,000	8,190,000	-		8,190,000	33,738,000
1805	v	2,500,000				4,300,000	38,038,000
Sep. loan	W	1,500,000			360,000	360,000	38,398,000
1806	X					3,320,000	41,718,000
1807	Y	2,000,000			212,000	3,012,000	44,730,000
Sep. loan	Z	1,500,000				2,409,625	47,139,625
1808	А	2,500,000		2,954,375		2,954,375	50,094,000
Int. def.						-	
1809	C	3,000,000		1,800,000		3,600,000	
1810	F	4,000,000				5,615,000	59,309,000
Sep. loan	G	1,400,000	1,965,250			1,965,250	
1811							
1812	N	4,500,000	7,656,000			7,656,000	68,930,250
		44,400,000	63,303,875	5,054,375	572,000	68,930,250	

### Also the Redemption of the same.

	Sum red. each year.	Amount redeemed.	Amount unredeemed.	Interest.	Annuity.	Manage- ment.	Total charge each year.
K M O P R	20,468 91.466 130,185 233,360 310,928 337,008	111,934 242,119 475,479 786,407	2,904,532 6,813,066 11,932,881 14,839,521 18,922,343 21,224,585	90,750 120,000 157,500 94,200 131,812 75,000	4,916	1,349 1,855 2,362 1,413 1,977 1,125	96,599 126,771 159,862 95,613 133,789 76,125
T U V W X Y Z A C F G	1,123,415 472,256 579,338 } 738,939 807,393 } 907,585 951,463 - 1,013,577 } 1,135,716 1,356,276 1,667,541	2,175,009 2,913,948 3,721,341 4,628,926 5,580,389 6,593,966 7,729,682 9,085,958	23,952,329 31,562,901 35,484,052 37,996,659 42,510,699 44,513,611 47,100,034 53,544,568 52,188,292 58,276,751	669,262 96,000 245,700 129,000 18,000 99,600 94,600 72,289 118,175 4,178 126,000 168,450 58,957	75,000	10,081 1,142 2,785 1,462 760 1,129 1,024 819 1,004 - 1,337 1,909 667	888,759 103,559 248,485 130,462 93,760 100,729 95,624 73,108 119,179 4,178 140,587 170,359 59,624 232,094
	10,653,499 Deduct red	2,129,891		2,402	2,260,508 2,402 2,258,104		
	debt rede	eemed,		319,605 1,810,286	104,083	3,622	323,227 1,934,879

TABLE V.

Progress of the whole Irish Funded Debt, payable in Dublin

Years.	Sums raised Irish	Capita	Capital funded, payable in Du Irish currency.					
Tours.	currency.	3½ per cent.	4 per cent.	5 per cent.	Total.			
1773-5-7	740,000							
1787	200,000	200,000			200,000			
1788	918,240	918,240			918,240			
1791, &c.	174,600		174,600		174,600			
1793	200,000			200,000				
Vote Cr.	150,000			150,000				
1794	1,029,650			487,983				
1795	1,591,666			400,000				
1796	640,000			640,000				
Vote Cr.	325,000			- '-	- '-			
1797	2,018,700			635,000	635,000			
1798	3,424,476			2,054,950	2,054,950			
1799	5,261,000			2,011,000				
1800	4,666,666			2,500,000	2,500,000			
1801	2,750,319			41,985	41,985			
1802	3,791,666	1,770,232			1,770,232			
	27,881,985	2,888,472	174,600	9,120,918	12,183,990			
1803	2,166,666			- '-				
1804	6,125,000			1,404,531	1,404,531			
1805	4,333,333			- 1-	- '-			
1806	4,166,666	2,780,000			2,780,000			
1807	3,844,666		53,000		53,000			
1808	3,458,333	1,012,500			1,012,500			
1809	4,500,000	1,500,000			1,500,000			
1810	5,856,198	_ ´- '-		6,198				
1811	2,501,000	3,000,000		1,000				
1812	6,388,000			313,000				
	71,221,850	12,680,972	227,600	10,845,648	23,754,220			
Bank of Ireland,								
prec. 1797	600,000			600,000	600,000			
1797	500,000			500,000	500,000			
1808				1,250,000	1,250,000			
	73,571,850	12,680,972	227,600	13,195,648	26,104,220			

and London, with the Annual Charge.

Years.	Capit	Capital funded, pay. in London— British currency.					Annual charge— Irish currency.		
	3 per	cent.	4 per	cent.	5 per	cent.	Interest.	Ann	uities.
1773-5-7	-	-	-	-	-	-	1	4	8,900
1787	-	-	-	-	-	-	7,000	-	-
1788	-	-	-	-	-	-	32,138	-	-
1791, &c.	-	-	-	-	-	-	6,984	-	-
1793	-	-	-	-	-	-	10,000		-
Vote Cr.	-	-	-	-	-	-	7,500	-	-
1794	-	-	-	-	50	0,000	51,482	-	-
1795	-	-	-	-	1,10	0,000		-	-
1796	-	-	-	-	-	-	\$2,000		-
Vote Cr.	-	-	-	-	30	0,000			-
1797	2,62	5,000	500	,000	-	-	130,062		4,875
1798	4,00	0,000	-	-	-	-	232,747		5,326
1799	5,25	0,000	-	-	-	-	271,175	-	-
1800	3,14	0,000	-	-	-	-	227,050		-
1801	4,39	3,750	-	-	-	-	144,896	-	-
1802	2,63	9,250	-	-	-		147,735	-	-
	22,04	8,000	300	,000	1,90	0,000	1,396,604	5	9,101
1803	3,20	0,000	-	-	-	-	104,000		6,951
1804	8,19	0,000	-	-	-	-	336,401	-	-
1805	4,30	0,000	-	-	36	0,000	159,250	8	1,250
1806	3,32	0,000	-	-	-	-	205,200	-	-
1807	5,20	9,625	-	-	21	2,000	182,916	-	-
1808	-	-	2,954	1,375	_		163,460	-	-
1809	1,80	0,000	1,800	,000	-	-	189,000	1	4,354
1810	7,58	0,250	Í -	-	-	-	246,668		-
1811	-	-	-	-	-	-	105,050	-	-
1812	7,65	6,000	-	-	-	-	316,970	-	
	63,30	3.875	5,054	.315	2,47	2,000	3,405,519	16	1,656
Bank of			1	1	,	•			1
Ireland,									
prec. 1797	-	-	-	-	-	-	30,000		
1797	-	-	-	-	-	-	25,000		8,125
1808	-	-	-	-		-	62,506	-	-
	63,30	3,875	5,054	,315	2,47	2,000	3,523,019	17	9,782

#### APPENDIX II.

TABLE VI.
Sinking Fund of 1 per cent. on Loans.

Years.	Loans charged with 1 per ct.	Loans not charged.	Annuities.	Sink.fund on loans.	Sink. fund on annuities.
1793 Loan	6,250,000			62,500	
1794 Loan	13,750,000		62,792	137,500	9,680
Navy Bills	1,926,526			19,265	
1795	24,000,000		85,500	240,000	12,835
Navy Bills	1,609,898			16,099	
1796	26,095,800		58,500	260,958	8,460
Navy Bills	4,414,074			44,140	
	10,793,825		20,582	107,938	2,925
Loyalty Loan	20,124,843			201,248	
1797	25,350,000		39,000	253,500	<b>5,</b> 308
Navy Bills	19,238,493			192,384	
Excheq. Bills	2,374,333		-	23,743	
1798 Loan	14,000,000	16,000,000	17,209	140,000	
	5,624,250			56,242	
1799 Loan	2,625,000	19,250,000		26,250	
1800 Loan	7,850,000	21,195,000		78,500	
1801 Loan	44,816,250			448,162	
Excheq. Bills	11,138,063		7,796	111,380	841
1802 Loan		30,351,375			
	241,981,355	86,796,375	291,379	2,419,813	42,289
1803 Loan	16,000 000	00,100,010	32,083	160,000	
1804 Loan	18,200,000			182,000	
1805 Loan	34,400,000			344,000	
Operat. L. L.	3,280,731			33,807	
1806 Loan	29,880,000			298,800	
1807 Loan	301,200	18,072,000		3,012	
1808 Loan	9,454,000			94,540	
Excheq. Bills	4,239,254			42,392	
1809	13,024,478		51,233	130,244	
Excheq. Bills	8,253,644			82,536	
1810 E. B.	8,581,108			85,811	
Loan	11,230,000			112,300	
1811 E. B.	7,278,392			72,784	
Loan	5,166,319			51,663	
Loan	16,800,000		41,500	168,000	
1812 E. B.	5,866,236			58,662	
Loan	7,332,795			73,327	
Loan	27,544,000			275,440	
	468,913,512	104,868,375	416,195	4,689,135	49,528
Not charged	104,868,375		19,666	49,548	
	573,781,887		438,861	4,738,683	Total, 1 p. c
Debt preced- ing 1793	238,231,248				4
Whole funded					

#### APPENDIX II.

#### TABLE VII.

#### Unfunded Debt.

Year ending 5th January	Excheq. Bills.	Navy debt.	Ordnance debt.	Total.	Increase or decrease.
5th January  1793 1794 1795 1796 1797 1798 1799 1800 1801 1802 1803 1804 1805 1806 1807 1808 1809	11,361,100 11,849,000 10,111,300	3,450,134 6,709,748 10,413,164 12,321,828 4,485,799 6,150,588 5,556,033 5,992,228 8,705,819 7,100,806 3,105,648 4,037,307 5,911,588 5,585,819 6,561,237 7,221,167	91,501 303,458 755,5631 763,153 548,233 983,249 631,831 701,428 399,760 682,342 1,260,48 31,104,512 1,255,077 1,165,822 861,366	14,802,375 18,862,306 20,524,464 27,348,459 18,464,552 20,414,666 20,849,683 26,984,819 35,628,099	+ 4,059,571 + 1,662,158 + 6,823,995 - 8,880,907 + 1,947,114 + 435,017 + 6,135,136 - 7,227,691 - 8,439,000 - 1,3826,113 + 8,728,027 + 1,680,955 + 151,981 + 5,331,565 + 2,731,733 + 7,733,673
1811 1812 1813	38,286,300 41,491,800 45,406,400	7,883,890	1,078,470	46,971,579 50,454,160 54,055,633	+ 3,482,587

#### Whole Unfunded Debt reported to Parliament.

	Exch. Bills, Navy and Ord- nance debt.	Miscellaneous articles.	Total.	Increase.
1811 1812 1313	46,971,579 50,454,166 54,055,632	3,648,368 3,573,893 3,783,064	50,619,947 54,038,059 57,838,696	+ 3,418,112 + 3,800,637

# TABLE VIII. Lord Henry Petty's Plan of Finance. Part I.—Loans on War Taxes.

1	1	2	3	4	5	6
Years.	Loans on	War taxes		Sum	Whole sum	Interest
1 2	war taxes.	mortgaged	war taxes	redeemed	redeemed.	on amount
94	war taxes.	each year.	mortgaged	each year.	redeemed.	redeemed.
1807	12,000,000	1,200,000	600,000	600,000	600,000	30,000
1808			1,200,000	1,230,000	1,830,000	
1809			1,800,000	1,891,500	3,721,500	186,075
1810		1,400,000	2,500,000	2,686,075	6,407,575	
1811	16,000,000	1,600,000	3,300,000	3,620,378		501,398
1812			4,100,000	4,601,398	14,629,351	731,467
1813				5,631,467	20,260,818	
1814	16,000,000		5,700,000	6,713,041	26,973,859	1,348,693
1815	16,000,000		6,500,000	7,848,693		1,741,127
1816	16,000,000		7,300,000	9,041,128		
1817	16,000,000		8,100,000	10,293,184		2,707,843
1818	16,000,000	1,600,000	8,900,000	11,607,843		
1819	16,000,000	1,600,000	9,700,000	12,988,235		
1820	16,000,000	1,600,000	10,500,000	14,437,647	93,190,589	4,659,529
-	210,000,000	21,000,000	75,100,000	93,190,589		
1821	12,000,000	1,200,000	10,500,000	14,559,529	107,750,118	5,387,505
1822	12,000,090	1,200,000	10,500,000	14,687,505	122,437,623	6,121,880
1823	12,000,000	1,200,000	10,500,000		137,259,503	
1824	14,000,000		10,500,000	14,862,974	152,122,477	7,606,123
1825	16,000,000		10,500,000	14,806,123	166,928,600	8,346,429
1826	16,000,000	1,600,000	10,500,000	14,746,429	181,675,029	9,083,751
	292,000,000	29,200,000		181,675,029		
		_				

Part II .- Supplementary Loans.

TAKT II Supplementary Louis.									
1 4	7	8	9	10	11	12			
Years.	Supplemen-	Interest.	Sinking	Sum redeemed	Whole sum	Interest			
Š	tary loans.	interest.	fund.	each year.	redeemed.	on amount redeemed.			
1807	200,000	10,000	3,333	3,333	3,333	166			
1808		70,000	23,333	26,833	30,166	1,508			
1809		130,000	43,333	71,508	101,674	5,083			
1810		100,000	33,333	108,416	210,090	10,504			
1811	1,600,000	80,000	26,666	140,504	350,594	17,530			
1812		160,000	<b>5</b> 3,333	200,863	551,457	27,573			
1813		240,000		290,906	842,363	42,118			
1814		320,000			1,254,481	62,724			
1815		400,000		566,057	1,820,538	91,027			
1816		480,000	160,000	754,360	2,574,898	128,744			
1817		560,000	186,666		3,553,642	177,682			
1818		640,000		1,241,015	4,794,657	239,732			
1819		720,000	240,000	1,543,065	6,337,722	316,886			
1820	,,	800,000	266,666	1,886,886	8,224,608	411,230			
	94,200,000	4,710,000		8,224,608					
1821		1,000,000		2,314,563	10,539,171	526,958			
1822		1,000,000		2,763,624	13,302,795	665,139			
1823		1,000,000		3,235,139	16,537,934	826,896			
1824		900,000		3,696,896	20,234,830	1,011,741			
1825		800,000		4,148,407	24,383,237	1,219,161			
1826	16,000,000	800,000	266,666	4,622,494	29,005,731	1,450,286			
	204,200,000	10,210,000	5,403,333	29,005,731					

# Lord Henry Petty's plan of Finance continued. Part III.—Joint View of both Loans.

				J					
1	13	14	15	16	17	18	19		
Years	Amount	Amount	War tax	Supplemen-	Total loans	Interest	Amount		
12	war tax	supplemen-	loans unre-	tary loans	unred.	on loans	taxes raise		
S	loans.	tary loans.	deemed.	unred.	umea.	unred.	each year		
1807	12,000,000	200,000	11,400,000	196,666	11,596,666	579,833	13,33		
1808	24,000,000	1,600,000	22,170,000	1,569,833	23,739,833	1,186,991	106,66		
1809	36,000,000	4,200,000	32,278,500	4,098,326	36,377,126	1,818,856	280,00		
1810	50,000,000			5,989,910	49,585,335	2,479,266			
1811	66,000,000				63,421,453	3,171,072			
1812	82,000,000					3,890,959			
1813	98,000,000				92,696,819	4,634,841	1,053,33		
	114,000,000				107,971,660				
	130,090,000				123,556,910	6,177,845			
	146,000,000		102,136,320		139,361,427	6,968,071	2,653,33		
	162,000,000		107,843.136		155,289,494	7,764,474			
	178,000,000		112,235,293		171,240,636				
	191,000,000		115,247,058		187,109,336				
1820	210,000,000	94,200,000	116,809,411	85,975,392	202,784,803	10,139,411	6,280,00		
						72,127,353	28,413,33		
1821	222,000,000	114,200,000	114,429,882	103,660,829	218,090,711	10,904,535	7,613,33		
1832	234,000,000	134,200,000	111,562,382	120,897,205	232,459,587	11,622,979	8,946,60		
1823	246,000,000	154,200,000	108,740,502	137,662,066	246,402,568	12,320,128	10,280,00		
1824	269,000,000	172,200,000	107,877,528	151,965,170	259,842,698	12,992,135			
11825	276,000,000	188,200,000	109,071,405	163,816,763	272,888,168	13,644,408			
1826	292,000,000	204,200,000	110,324,976	175,194,229	285,519,205	14,275,960	13,613,33		
-	147,887,498 92,893,3								
							·		

Part IV .- Comparison with other Systems.

TART IV.—Compartson with other Systems.									
1-1	20	21	22	23	24	25			
Vears	No sinki	ng fund.	Sinking fun	d of 1-100.	Sinking fur	nd of 1-60.			
3	Debt.	Taxes.	Debtunred.	Taxes.	Debt unred.	Taxes.			
1807	11,000,000	550,000	10,890,000	660,000	10,816,666	733,333			
1803	22,000.000	1,110,000	21,664,500	1,320,000	21,440,833	1,466,666			
1809	33,000,000			1,980,000		2,200,000			
1810	44,000,000	2,200,000	42,843,611	2,640,000		2,933,333			
1811	55,000,000	2,750,000	53,235,792			3,666,666			
1812	66,000,000	3,300,000	63,487,582	3,960,000		4,400,000			
1813	77,000,000	3,850,000	73,591,961	4,620,000	71,319,935	5,133,333			
1814	88,000,000	4,400,000				<i>5</i> ,866,666			
1815	99,000,000	4,950,000	93,328,627	5,940,000		6,600,000			
1816	110,000,000	5,500,000	102,945,069	6,600,000	98,241,782	7,333,333			
1817	121,000,000		112,382,323	7,260,000	106,737,206	8,066,666			
1818	132,000,000	6,600,000	121,631,439		114,719,067	8,800,000			
1819	143,000,000	7,150,000	130,683,011		122,471,687	9,533,333			
1820	154,000,000	7,700,000	139,527,162	9,240,000	129,878,604				
		57,750,000		69,300,000		77,000,000			
1821	165,000,000	8,250,000	148,153,520		136,922,535	11,000,000			
1822	176,000,000	8,800,000	156,551,196		143,585,328				
1823	187,000,000		164,708,756		149,847,928	12,466,666			
1824	198,000,000		172,614,194		155,690,322	13,200,000			
1825	209,000,000		180,254,904		161,091,507	13,933,333			
1826	220,000,000	11,000,000	187,617,650	13,200,000	166,029,417	14,666,666			
1		115,000,000		138,600,000	1	154,000,000			

TABLE IX.

#### Amount of British Funded Debt redeemed and transferred.

Years.	3 per cents. redeemed.	4 per cents. re- deemed.		Total redeemed.	3 per cents. transferred for land tax.	onverted into life annuities.	Total.
Prec. 1791	6,772,350			6,772,350			6,772,350
1791	1,507,100			1,507,100			1,507,100
1792	1,962,650			1,962,650			1,962,650
1793	2,174,405			2,174,405			2,174,405
1794	2,804,945			2,804,945			2,804,945
1795	2,576,455	507,000		3,083,453			3,083,455
1796	4,390,670			4,390,670			4,390,670
1797	6,695,585			6,695,585			6,695,585
1798	7,779,807			7,779,802			7,779,807
1799	7,151,984			7,151,982			20,211,570
1800	7,247,560			7,247,560			10,281,776
1801	7,333,393	685,000	-	8,018,393			9,925,739
1802	6,241,611	1,425,400		7,667,011			8,846,450
1803	10,442,552			10,442,552			12,409,853
1804	11,163,292		142,000	11,305,292			11,951,711
1805	12,142,043			12,142,043			12,673,476
1806	12,714,715			12,714,715	390,465		13,105,180
1807	14,076,585		-) -	14,076,585			14,337,209
1808	12,192,714	1,678,300		13,871,014			14,574,534
1809	11,900,820	2,334,000		14,234,820	207,070	558,561	15,000,451
1810	14,345,387	1,166,700		15,512,087	284,623	290,777	16,087,487
1811	17,983,457			17,983,457		290,751	18,509.174
1812	20,922,876			20,922,876	437,747	355,542	21,716,165
	202,522,950	7,796,400	142,000	210,461,356	24,378,804	1,961,582	236,807,742
•		I	rish debt	redeemed,	3 per cents.	-	10,643,499
		,	Portugues	e debt rede	emed, ditto		176,674
		1	mperial d	ebt redeem.	ed, ditto -		1,361,974

#### TABLE X.

Comparison of Mr. Vansittart's plan of Finance with the former System.

Part I .- Comparison of Taxes Levied.

Year	Forme	r System.	New	System.	Excess of
endin	g Taxes im-	Taxes levied	Taxes im-	Taxes levied	taxes by for-
1st Au	g. posed ann.	annually.	posed ann.	annually.	mer system.
1814	1,866,666	1,866,666	1,127,963	1,127,963	738,703
1815	1,866,666	3,733,332		1,127,963	2,605,369
1816				1,127,963	4,472,035
1817				1,127,963	6,338,701
1818		9,333,330	1,290,206	2,418,169	6,915,161
1819		11,199,996	676,775	3,094,944	8,105,052
1820			2,008,333		7,963,385
1821	1,866.666	14,933,328	1,995,833	7.099,110	7,834,218
	14,933,328	67,199,976	7,099,110	22,227,352	44,972,624
1822		16,733,328	1,987,500	9,086,610	7,646,718
1823	1,800,000			9,086,610	9,446,718
1824	. 1,800,0√0	20,333,328	624,431	9,711,041	10,622,287
1825	1,800,000	22,133,328	1,158,356	10,869,397	11,263,931
1826			1,979,166	12,848,563	11,084,765
1827			1,095,316	13,943,879	11,789,449
1828			618,013		12,971,436
1829	1,800,000	29,333,328	1,962,500	16,524,392	12,808,936
	29,333,328	251,466,600	16,524,392	118,859,736	132,606,864

Part II .- Comparison of sinking Funds.

_					
	Years.	Sinking fund, former system.	Sinking fund, new system.	sinking fund,	Excess of sink- ing fund, o. s. a- bove add. taxes.
1	1814	14,423,455	13,647,817	775,638	36,935
1	1815	15,634,627	12,860,207	2,774,420	169,051
1	1816	16,906,357	12,033,217	4,873,140	401,105
1	1817	18,241,674	11,164,877	7,076,797	738,096
1	1818	19,643,757	11,607,837	8,035,920	1,120,759
١	1819	21,115,944	11,428,842	9,687,102	1,582,050
ı	1820	22,661,740	12,639,033	10,022,707	2,059,322
1	1821	24,284,826	13,896,609	10,388,217	2,553,999
ľ		152,912,380	99,278,439	53,633,941	8,661,317
1	1822	24,718,019	15,208,314	9,509,705	1,862,987
1	1823	26,426,419	14,498,729	11,927,690	2,480,972
1	1824	28,220,239	14,409,318	13,810,921	3,188,634
1	1825	30,103,750	14,876,057	15,227,693	3,963,762
t	1826	32,081,437	16,227,984	15,853,453	4,768,688
1	1827	31,158,008	16,719,465	17,438,543	5,649,094
1	1828	36,338,408	16,734,351	19,604,057	6,632,621
1	1829	38,627,828	18,161,693	20,466,135	7,657,199
1		403,586,488	226,114,350	177,472,138	44,865,274

TABLE XI.

#### Rates of Interest and Terminable Annuities on Loans.

	Years.	Sums borrowed.		Interest.		Terminable annuities.			Duration of annuity.		Total		1.
Seven years' war.	*1755 *1756 and by lottery, 1757 *1758 and by lottery, *1750 *1760 *1761 and by lottery, 1762 *1763	3,000,000 4,500,000 500,000 6,600,000 8,000,000 11,400,000	000000000000	s. 0 10 0 0 0 0 9 1 0 0	D. 0 0 0 0 0 0 0 0 0 0 0 0 0 0	L	s. 2 10 0 2 0	7 6 0 0		ears	1333343333443 5 4	s. 0 10 0 2 10 0 9 2 2 0 0	D. 0 0 0 6 0 0 0 4 6 0 0
Peace.	*1766 *1767 *1768	1,500,000 1,500,000 1,900,000	3	0 0 0	0 0			 : :	-		20 20 20	0 0 0	0
American war.	*1776 †1777 †1778 †1779 †1780 †1781 †1782 †1783 †1784	2,000,000 5,000,000 6,000,000 5,000,000 12,000,000 12,000,000 13,500,000 6,000,000	4334554	4 0 0 0 0 0 10 0 0	6 0 0 0 0 0 0	0 2 3 1 0 0	10 10 15 16 17 13 5	0 0 0 3 6 4 6	life, o life, o 80 y 78 y 77 y	ears or 30ys. or 29ys. ears ears ears years	3 4 5 6 5 5 5 4 5	4 10 10 15 16 10 17 13 7	6 0 0 0 3 0 6 4 6
Bills funded.	1764 1784 1785	1,482,000 6,397,900 9,865,942	5	0 7 11	0 6 4	-		-		:	3 5 5	0 7 11	0 6 4

<sup>\*</sup> The subscribers to the loans marked thus had also the profits of lotteries, the prizes in which were funded. When funded on the same terms as the rest of the loan, they are joined to it in the above Table; but when funded on different terms, they are stated separately.

Fractions under a penny in the rate of interest are omitted.

<sup>†</sup>The subscribers to the loans marked thus had also the profits of lotteries, the prizes in which were paid.

TABLE XI.—Continued.

	Years. bo		Years. Sums borrowed.						In	ter	est.	Terminable annuities.		Duration of annuities.		Total.		al.
French revolution war.	1793 1794 1795 1796 1797 1798 1799	4,500,000 11,006,000 18,000,000 18,000,000 7,500,000 18,000,000 14,500,000 17,000,000 3,000,000 15,500,000 20,500,000 28,000,000	444566554	s. 3 0 6 7 7 12 1 0 12 5 14 5	D. 4 0 8 0 0 6 0 0 5 0 2 5	L. 0 0 0 0 0	s. 111 9 6 5 6 4	D. 5 6 6 6 6 11	-	ears.  66	L. 4 4 4 4 4 5 6 6 5 5 4 5	s. 3 11 16 13 12 12 7 4 12 5	D. 44 55 26 66 66 0111 50 22 55					
Peace	1802	25,000,000	3	19	2	-		-	-		3	19	2					
ed war, 1803.	1803 1804 1805 for Ireland, 1806 1807 for Ireland, 1808 1809 1810 for Ireland, 1811 1812	12,000,000 14,500,000 22,500,000 1,500,000 20,000,000 14,200,000 1,500,000 14,600,000 14,600,000 1,400,000 4,931,300 6,789,625 22,500,000 27,000,000 22,000,000	551444444545555	16 9 3 4 19 14 16 14 4 4 4 2 8 8 8 5 2 6	022077460221000702	0 - 5 - 0 - 0 - 0	6 0 8	5 - 0 10 11 - 6 -	-	563 - 543 503 - 483 - 463	5556444444555555	2 9 3 4 19 14 16 14 12 4 4 2 14 8 5 10 6	55 22 00 77 74 66 100 22 21 101 111 07 66 22					

Interest, &c. of Debt contracted by Funding Bills.

Years.	Amount bills.	Interest.			Terminable annuities.			Durat annu		Total.		
		L.	s.	D.	L.	s.	D.	Yes	ars.	L.	s.	D
1794	1,907,451		1	0	-		-	-	-	5	1	(
1795	1,490,647		8	0	-		-	-	-	5	8	(
1796	4,226,727	5	4	2	-		-	-	-	5	4	2
	13,029,399	5	7	11	-		-	-	-	5	7	11
1802	8,910,450	4	15	0	0	10	9	5	83	5	5	ç
1808	4,000,000	5	3	9	-		-	-	-	5	4	9
1809	7,932,100	5	3	1	-			-	-	5	3	1
1810	8,311,000	5		3	-			-	_	5	3	3
1811	7,018,700	5	3	8	-		-	-	-	5	3	8
1812	5,431,700	5	8	0	-		-	-	-	5	8	(
1813	12,000,000	5	15	6	-		-	-	-	5	15	$\epsilon$
	3,755,700	5	11	2	-					5	11	2



#### POSTSCRIPT II, TO PART II.

A loan was contracted in November, 1813, 3 per cent. reduced, and L.67 in the 3 per ce	
Sums raised,	L.22,000,000
Sum funded in 3 per cent. reduced, - and in 3 per cent. cons	L.24,200,000 14,740,000
Total funded,	L.58,940,000
Interest,	L.1,168,200

Exchequer Bills were received, to the extent of one-half of this loan, at the rate of L.100. 5s. for each L.100 of Exchequer Bills.

Five per cent. discount was allowed for payment by advance. The allowance on former loans was generally 4 per cent.

The omnium of this loan soon rose to an unparalleled height, and is now [February, 1814,] transacted at about 20 per cent.

#### ADDITION TO PAGES 117, 118.

The amount of Irish debt deemed on the 5th January					lin,	re-	
In the 3½ per cents.	_	• '	)-I	,	-		L.3,521,088
In the 5 per cents.			,	-		-	1,823,967
					9		L.5,345,055
Which was redeemed	for		-		~		L.4,242,529

Irish currency

	Irish currency.
Amount redeemed in Britain, L.10,653,499 British, in Ireland,	L.11,541,290 5,345,055
Total redeemed, Leaving unredeemed,	L.16,886,345 85,950,647
	L.102,836,992
The charge of management of the Irish debt amounted to L.22,886. And the sinking fund for the debt payable in Part of annual grant of L.100,000,	
Expired annuities, 1 per cent. on loans,	- 54,043 221,962
Interest on debt redeemed,	L.343,654 - 214,436
Amount sinking fund, 5th January, 1813,	L.558,090





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